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RUDIMENTARY
ARCHITECTURE:

FOR THE USE OF BEGINNERS.

With Illustrations.

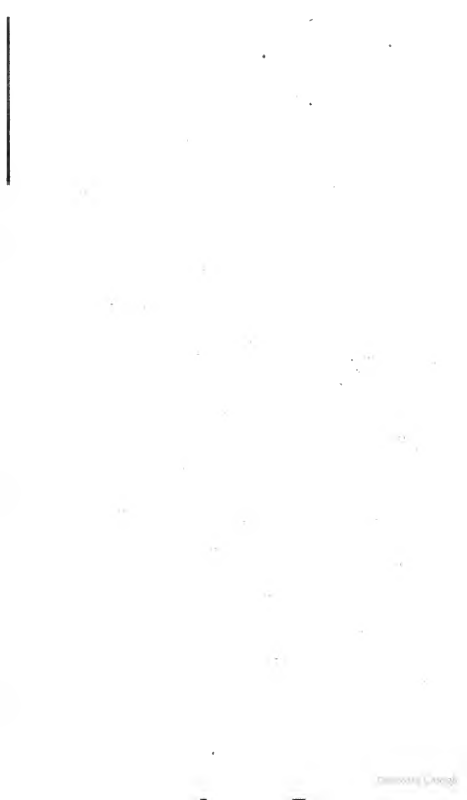
THE ORDERS.

BY W. H. LEEDS, ESQ.

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RUDIMENTARY
ARCHITECTURE:

FOR

THE USE OF BEGINNERS,
AND STUDENTS.

THE ORDERS,
AND THEIR ÆSTHETIC PRINCIPLES.

BY

W. H. LEEDS, ESQ.

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PREFACE TO FIRST EDITION.

IT is important that an elementary treatise,—more particularly if it profess to be a popular one, intended for the use of beginners as well as for professional students,—should not only give rules, but explain principles also; and unless the latter be clearly defined, the memory alone is exercised, perhaps fatigued, owing to the former being unsupported by adequate reasoning. To confine instruction to bare matter-of-fact is not to simplify, much less to popularize it; since such mode entirely withholds all that explanation which is so necessary for a beginner, who will therefore probably feel more disheartened than interested. Any study which is presented in its very driest form by being divested of all that imparts interest to the subject, will appear dry and uninteresting in itself, and prejudice may thus be excited against it at the very outset.

Those who pursue the profession of Architecture must of course apply themselves to the study of it technically, and acquire their knowledge of it, both theoretical and practical, by methods which partake more or less of routine instruction. Others neither will nor even can do so. If the public are ever to become acquainted with Architecture,—not, indeed, with its scientific and mechanical processes of construction, but in its character of Fine Art and Design,—other methods of study than those hitherto provided must be furnished, as it appears to have been assumed that those alone who have been educated to it professionally can properly understand any thing of even the *Art* of Architecture,—a fatal mistake, which,

had it clearly perceived its own interest, the Profession itself would long since have attempted to remove; it being clearly to the interest of Architects that the public should acquire a taste for Architecture, and some insight into it.

The study of Architecture, it may be said, has of late years acquired an increased share of public attention; but it has been too exclusively confined to the Mediæval and Ecclesiastical styles, which have consequently been brought into repute and general favour,—a result which strongly confirms what has just been recommended, namely, the policy of diffusing architectural taste as widely as possible. As yet, the taste for Architecture and the study of it, so promoted, has not been duly extended; for next to that of being acquainted with the Mediæval, the greatest merit, it would seem, is that of being ignorant of Classical Architecture and its Orders; which last, however ill they may have been understood, however greatly corrupted and perverted, influence and pervade, in some degree, the Modern Architecture of all Europe, and of all those countries also to which European civilization has extended. Nevertheless, no popular Manual on the subject of the Orders has yet been provided,—a desideratum which it is the object of the following pages to supply.

W. H. LEEDS.

PREFACE TO SECOND EDITION.

WITH the reception given to this Treatise on its first appearance its Author has every reason to be satisfied ; but however useful it may have been found in explaining the *rationale* of the Orders and the general system of Classical Architecture, he cannot possibly flatter himself that it has in any degree contributed to the promoting a taste for that style, or the modern one founded upon it. After being for a length of time inordinately extolled, with far more of conventional cant, it may be suspected, than any real critical or æsthetic appreciation of it, that style has fallen into discredit, at least with the majority of writers, who loudly insist upon our henceforth abandoning it.

Among the objections started against it, much stress is laid upon that derived from its Paganism. Even *Renaissance* has been reviled by one most moral, virtuous, and immaculate critic, as being at the best quite semi-pagan in spirit, and moreover nothing less than 'LASCIVIOUS'!—a style, consequently, that ought to be put down by "The Society for the Suppression of Vice." Well! let us hope that that exceedingly squeamish and superlatively strait-laced gentleman will not get the nickname of 'Lascivious Ruskin.'—But enough here, although in itself it is very little, as regards the lack-a-daisical objections of Tartuffes and ultra-Puritans.

At present there is a sort of anarchy in Architectural doctrine and taste. While some are for confining us to Mediævalism or rather Pseudo-Mediævalism, others call upon us to renounce both the Pseudo-Mediæval and the Pseudo-Classical, and to get up an entirely new style founded upon the employment of newly-introduced materials, and consequent new modes of construction and design ; notwithstanding that any further advance, or attempt at advance, in any of the styles

now actually practised, is virtually prohibited by being scouted and sneered at.

As far as Taste is concerned, whether in regard to Architecture itself, or to Furniture and Decorative Art generally, actual prospects are anything but cheering; for what with Utilitarianism, Antiquarianism, and Materialism—all pulling, too, different ways,—little account is taken of positive æsthetic value. Far more importance is attached to mere elaboration, or to mere material, than to artistic design, or artistic effect. The general rage for cheap showiness on the one hand, and the rage for no less vulgar than extravagant purse-proud ostentation on the other, are symptoms among us of evil augury. In imperial and insanely luxurious Rome, the brains of a hundred peacocks were sometimes served up at a banquet as a single dish: with less taste for brains, and, perhaps, with very few of our own, we are satisfied with expending our admiration upon such extravagant and morbid fancies as rigmarole Austrian Beds and Malachite Doors.

As prefaces are very seldom read, the above escapade will probably escape all but those who will be far too discreet to take any notice of it. And as prefaces are usually ignored, it is chiefly for form sake here stated, that excepting the additional chapters on Supercolumniation, and Anthropomorphic Pillars, this edition is nearly a reprint of the first one. It is indeed further augmented by an Appendix containing two or three detached articles, which, if not exactly in keeping with the character of an 'Elementary' Treatise—as it must be confessed, is the case, they being in themselves more or less polemical, disquisitorial, and critical—do not at all interfere with the Treatise itself. Besides which it is to be hoped that those who shall not merely have perused, but carefully studied what is said of the 'Orders,' will be prepared for comprehending and taking an interest in the more discursive criticism which has been here thrown into the shape of an Appendix.

W. H. LEEDS.

Charlotte Street, Portland Place,
December, 1851.

RUDIMENTARY ARCHITECTURE.

THE ORDERS.

ALTHOUGH this little treatise is limited to the consideration of Ancient and Classic Architecture, we may be allowed to explain briefly what is to be understood by Architecture in its quality of one of the so-called Fine Arts, if only to guard against confused and erroneous notions and misconceptions. It will therefore not be deemed superfluous to state that there is a wide difference between Building and Architecture,—one which is apparently so very obvious that it is difficult to conceive how it can have been overlooked, as it generally has been, by those who have written upon the subject. Without building we cannot have architecture, any more than without language we can have literature; but building and language are only the *matériel*,—neither of them is the art which works upon that *matériel*, nor the productions which it forms out of it. Building is *not* a fine art, any more than mere speaking or writing is eloquence or poetry.* Many have defined architecture to be the art of building according to rule; just as well might they define eloquence to be the art of speaking according to grammar, or poetry the art of composing according to prosody. Infinitely more correct and rational would it

* It has lately been suggested that the adoption of the term *Tecture* for mere Building and Construction, and that of *Kalotecture* (or beautiful tecture) for Architecture, would at once remove a great deal of the misconception now prevalent, and would clearly define the distinction to be observed between the two. So, no doubt, it would; therefore, although it is vain to think of bringing those new terms into popular use, they may be usefully applied in didactic writings, or wherever it is necessary to define and keep in view the difference between Building and Architecture.

be to say that architecture is building greatly refined upon,—elevated to the rank of art by being treated *æsthetically*, that is to say, artistically. In short, architecture is building with something more than a view to mere utility and convenience; it is building in such a manner as to delight the eye by beauty of forms, to captivate the imagination, and to satisfy that faculty of the mind which we denominate taste. Further than this we shall not prosecute our remarks on the nature of architecture, but come at once to that species of it which is characterized by the Orders.

In its architectural meaning, the term **ORDER** refers to the system of columniation practised by the Greeks and Romans, and is employed to denote the columns and entablature together; in other words, both the upright supporting pillars and the horizontal beams and roof, or *trabeation*, supported by them. These two divisions, combined, constitute an Order; and so far all Orders are alike, and might accordingly be reduced to a single one, although, for greater convenience, they are divided into *three* leading classes or families, distinguished as Doric, Ionic, and Corinthian.* It was formerly the fashion to speak of the **FIVE ORDERS**, and also to treat of them as if each Order were reduced to a positive standard, admitting of very little deviation, instead of in reality including in itself many subordinate varieties, which, however they may differ from each other, are all formed according to one common type, and are thereby plainly distinguished from either of the two other Orders. The vulgar Five Orders' doctrine is, it is to be hoped, now altogether exploded; for if the so-called Tuscan, which is only a ruder and bastard sort of Doric, and of which no accredited ancient examples remain, is to be received as a distinct Order, a similar distinction ought to be established between the original Ancient or

* Mr. Ruskin does, indeed, by the mere *fiat* of his pen reduce the Orders to only two, for he expunges Ionic from the number as unworthy of the name of one! concerning which notable freak of that eminent doctrinaire more will be said in the Appendix.

Grecian and the derivative Roman and Italian Doric, which differ from the other quite as much, if not more so, than the Tuscan does from either. Even the Grecian Doric itself exhibits many decided varieties, which, though all partaking of one and the same style, might just as well be made to constitute so many Doric Orders. The Pæstum-Doric, for instance, is altogether dissimilar from the Athenian or that of the Parthenon. Again, if the Composite is to be received as a distinct Order from the Corinthian, merely on account of its capital being of a mixed character, partaking of the Ionic, inasmuch as it has volutes, and of the Corinthian in its foliage, the Corinthian itself may with equal propriety be subdivided into as many distinct Orders as there are distinct varieties; and the more so, as some of the latter vary from each other very considerably in many other respects than as regards their capitals. Except that the same general name is applied to them, there is very little in common between such an example of the Corinthian or foliage-capital class as that of the monument of Lysicrates, and that of the Temple at Tivoli, or between either of them and those of the Temple of Jupiter Stator and the Pantheon, not to mention a great many others. Instances of the so-called Composite are, moreover, so exceedingly few, as not even to warrant our calling it the *Roman Order*, as if it had been in general use among the Romans in every period of their architecture. With far greater propriety might the Corinthian itself, or what we now so designate, be termed the Roman Order, being not only the one chiefly used by that people, but also the one which they fairly appropriated to themselves, by entering into the spirit of it, and treating it with freedom and artistic feeling. In fact, we are indebted far more to Roman than to Grecian examples for our knowledge of the Corinthian; and it is upon the former that the moderns have modelled their ideal of that Order.

What has been said with regard to striking diversity in the several examples of the Corinthian, holds equally good as to those of the Ionic Order, in which we have to distinguish not

only between Roman and Grecian Ionic, but further, between Hellenic and Asiatic Ionic. Nor is that all: there is a palpable difference between those examples whose capitals have a *necking* to them, and those which have none,—a difference quite as great, if not greater, than that which is recognized as sufficient to establish for the Composite the title of a distinct Order from the Corinthian; inasmuch as the necking greatly enlarges the proportion of the whole capital, and gives increased importance to it. The Ionic capital further admits of a species of variation which cannot possibly take place in those of either of the other two Orders: it may have either *two faces* and two baluster *sides*, or four equal and similar sides,—the volutes being, in the latter case, turned diagonally, the mode chiefly practised by the Romans; but by the Greeks, and that not always, only in the capitals at the ends of a portico, by placing the diagonal volute at the angle only, so as to obtain two outer faces for the capital, one in front, the other on the ‘return’ or flank of the portico.

It is therefore unnecessary to say, that to divide the Orders into *Five*, as has been done by all modern writers, until of late years, and to establish for each of them one fixed, uniform character, is altogether a mistake; and not only a mere mistake as regards names and other distinctions, but one which has led to a plodding, mechanical treatment of the respective Orders themselves, nothing being left for the Architect to do, so far as the Order which he employs is concerned, than merely to follow the example which he has selected,—in other words, merely to *copy* instead of *designing* by *imitating* his model with artistic freedom and spirit. Our view of the matter, on the contrary, greatly simplifies and rationalizes the doctrine of the Orders, and facilitates the study of them by clearing away the contracted notions and prejudices which have been permitted to encumber it; and owing to which, mere conventional rules, equally petty and pedantic, have been substituted for intelligent guiding maxims and principles.

Having thus far briefly explained the rationale of the Orders

with regard to the division of them into three leading *classes*, each of which, distinct from the other two, yet comprises many varieties or *species*,—which, however much they may differ with respect to minor distinctions, all evidently belong to one and the same style, or what we call Order,—we have now to consider their constituent parts, that is, those which apply to every Order alike. Hitherto it has been usual with most writers to treat of an Order as consisting of three principal parts or divisions, viz. pedestal, column, and entablature. The first of these, however, cannot by any means be regarded as an integral part of an Order. So far from being an essential, it is only an *accidental* one,—one, moreover, of Roman invention, and applicable only under particular circumstances. The pedestal no more belongs to an Order than an attic or *podium* placed above the entablature. In the idea of an Order we do not include what is extraneous to the Order itself: it makes no difference whether the columns stand immediately upon the ground or floor, or are raised above it. They almost invariably are so raised, because, were the columns to stand immediately upon the ground or a mere pavement, the effect would be comparatively mean and unsatisfactory; the edifice would hardly seem to stand firmly, and, for want of apparent footing, would look as if it had sunk into the ground, or the soil had accumulated around it. With the view, therefore, of increasing height for the whole structure, and otherwise enhancing its effect, the Greeks placed their temples upon a bold substructure, composed of *gradini* or deep steps, or upon some sort of continuous *stylobate*; either of which modes is altogether different from, and affords no *precedent* for, the pedestal of modern writers. And here it may be remarked, that of the dignity imparted to a portico by a stylobate forming an ascent up to it in front, we have a fine example in that of St. George's Church, Bloomsbury, which so far imitates the celebrated *Maison Carrée* at Nismes. Nevertheless, essential as some sort of stylobate is to the edifice itself, it does not properly belong to the Order, any

more than that equally essential—in fact, more indispensable part—the roof.

It is not without some regret that we abandon, as wholly untenable, the doctrine of the pedestal being an integral part of an Order: it would be so much more agreeable to say that the entire Order consists of three principal divisions, just the same as each of the divisions themselves. As regards the entire structure, such triplicity, that of ‘beginning, middle, and end,’ was observed. For ‘beginning,’ there was substructure, however denominated, or whether expressly denominated at all, or not; for ‘middle,’ there were the columns; and for ‘end’ or completion, the entablature. For the whole of a structure, there is or ought to be such ‘beginning, middle, and end;’ but from the Order itself we exclude one of them, as not being dependent upon it either for character or treatment.

The pedestal being discarded as something apart from the Order itself, the latter is reduced to the two grand divisions of column and entablature, each of which is subdivided into three distinct parts or members, viz. the column, into *base*, *shaft*, and *capital*; the entablature, into *architrave*, *frieze*, and *cornice*; so that the latter is to the entablature what the capital is to the column, namely, its crowning member,—that which completes it to the eye. Yet, although the above divisions of column and entablature hold good with regard to the general idea of an Order, the primitive Greek or Doric one does not answer to what has just been said, inasmuch as it has no base,—that is, no mouldings which distinctly mark the foot of the column as a separate and ornamented member. Hence it will perhaps be thought that this Order is not so complete as the others, since it wants that member below which corresponds with the capital above. Still the Grecian Doric column is complete in itself: it needs no base,—in fact, does not admit of such addition without forfeiting much of its present character, and thus becoming something different. Were there a distinct base, the mouldings composing it could not very well

exceed what is now the lower diameter or actual foot of the column; because, were it to do so, either the base would become too bulky in proportion to the capital, or the latter must be increased so as to make it correspond in size with the enlarged lower extremity. Even then that closeness of *intercolumniation* (spacing of the columns), which contributes so much to the majestic solidity that characterizes the genuine Doric, could not be observed; for unless the columns were put considerably further apart, the bases would scarcely allow sufficient passage between them. The only way of escaping from these objections and difficulties is by making the shaft of the column considerably more slender, so that what was before the measure of the lower diameter of the shaft itself, becomes that of the base. That can be done,—at least something like it has been done; but the result is an attenuated Roman or Italian Doric, differing altogether in proportions from the original type or Order. The shaft no longer tapers visibly upwards, or, what is the same thing, expands below.

Before we come to speak of the Orders severally and more in detail, there are some other matters which require to be noticed; one of which is the origin of the Greek system of columniation, or the prototype upon which it was modelled. Following Vitruvius, nearly all writers have agreed to recognize in the columnar style of the ancients the primitive timber hut, as furnishing the first hints for and rudiments of it. Such theory, it must be admitted, is sufficiently plausible, if only because it can be made to account very cleverly for many minor circumstances. Unfortunately, it does not account at all for, or rather is in strong contradiction to, the character of the earliest extant monuments of Greek architecture. Timber construction would have led to very different proportions and different taste. Had the prototype or model been of that material, slenderness and lightness, rather than ponderosity and solidity, would have been aimed at; and the progressive changes in the character of the Orders would have been reversed, since the earliest of them all would also have been the

lightest of them all. The principles of stone construction have so evidently dictated and determined the forms and proportions of the original Doric style, as to render the idea of its being fashioned upon a model in the other material little better than an absurd though time-honoured fiction. Infinitely more probable is it, that the Greeks derived their system of architecture from the Egyptians; because, much as it differs from that of the latter people with regard to taste and matters of ornamentation, it partakes very largely of the same *constitutional* character. At any rate the doctrine of a timber origin applies as well to the Egyptian as to the Hellenic or Grecian style: Indeed, if there be anything at all that favours such doctrine, it is, that construction with blocks of stone would naturally have suggested *square* pillars instead of round ones; the latter requiring much greater labour and skill to prepare them than the others. But, as their pyramids and obelisks sufficiently testify, the most prodigal expenditure of labour was not at all regarded by the Egyptians. That, it will perhaps be said, still does not account for the adoption of the circular or cylindrical form for columns. We have therefore to look for some sufficiently probable motive for the adoption of that form; and we think that we find it in *convenience*. In order to afford due support to the massive blocks of stone placed upon them, the columns were not only very bulky in proportion to their height, but were placed so closely together, not only in the fronts of porticoes, but also within them, that they would scarcely have left any open space. Such inconvenience was accordingly remedied by making the pillars round instead of square. Should such conjectural reason for the adoption of circular columns be rejected, it is left to others to propound a more satisfactory one, or to abide, as many probably will do, by the old notion of columns being so shaped in order to imitate the stems of trees. It is enough that whatever accounts for the columns being round in Egyptian architecture, accounts also for their being the same in that of the Greeks.

Among other fanciful notions entertained with regard to columns and their proportions, is that of the different orders of columns being proportioned in accordance with the human figure. Thus the Doric column is said to represent a robust male figure, and those of the two other Orders, female ones,—the Ionic, a matron; the Corinthian, a less portly specimen of feminality. Now, so far from there being any general similitude between a Grecian Doric column and a robust man, their proportions are directly opposite,—the greater diameter of the column being at its foot, while that of the man is at his shoulders. The one tapers *upwards*, the other *downwards*. If the human figure and its proportions had been considered, columns would, in conformity with such type, have been wider at the top of their shafts than below, and would have assumed the shape of a terminus,* or of a mummy-chest. With regard to the other two Orders, it is sufficient to observe, that if so borrowed at all, the idea must have been preposterous. We happen to have a well-known example of statues or human figures, and those, moreover, female ones, being substituted for columns beneath an entablature; and so far are they from confirming the pretended analogy between the Ionic column and the proportions of a female, that they decidedly contradict it, those figures being greatly bulkier in their general mass than the bulkiest and stoutest columns of the Doric Order. At any rate, one hypothesis might satisfy those who will not be satisfied without some fancy of the kind, because two together do not agree: if columns originated in the imitation of stems of trees, we can dispense with the imitation of men and women, and *vice versa*.

Some may think that it is hardly worth while to notice such mere fancies; yet it is surely desirable to attempt to get rid of them by exposing their absurdity, more especially as they

* The species of statue so called, and consisting of the upper part of a human figure growing out of a pedestal which tapers downwards, and appears to enclose the rest of the body. See the remarks in the Appendix concerning Anthropestylar pillars, &c.

still continue to be gravely brought forward and handed down traditionally by those who write upon the Orders, or who, if they do not actually *write*, repeat what others have written. It is worth while to clear away, if possible, and that, too, at the very outset of the study, erroneous opinions, prejudices, and misconceptions. We do not pretend to explain and trace, step by step, the progress of the Doric Order, and of the columnar system of the Greeks, from their first rudiments and formation. We have only the results of such progressive development or formation; of the actual formation itself we neither know nor can now ever know anything; nor should we be a whit the wiser, at least not a whit the cleverer—which is, after all, the main point of all, if we did. The utmost that can now be done is to take the results themselves, and from them to reason backwards to causes and motives. Adopting such a course, we may first observe, that there is a very striking and characteristic difference between Egyptian and Grecian taste and practice in one respect: in the former style the columns are invariably *cylindrical*, or nearly so,—in the other they are *conical*, that is, taper upwards, and in some instances so much so, that were they prolonged to double their height, they would be almost perfect cones, and terminate like a spire. This tapering greatly exceeds that of the stems of trees, taking for their stem the trunk, from above which the branches begin to shoot out. It appears to have been adopted for purely artistic reasons, certainly not for the sake of any positive advantage, since the diminution of the shaft, and the great contraction of the diameter just below the capital, must rather decrease than at all add to the strength of the column. What, then, are the artistic qualities so obtained? We reply,—variety and contrast, and the expression of strength without offensive heaviness. The sudden or very perceptible diminution of the shaft—it must be borne in mind that our remarks refer exclusively to the original Greek style or Doric Order—produces a double effect; it gives the column an expression of greater stability than it otherwise would possess, combined

with comparative lightness. What is *diminution* upwards, is also *expansion* downwards; and similar difference and contrast take place also with respect to the intercolumns, although in a reverse manner, they being wider at top than at bottom. So far the principle of contrast here may be said to be twofold, although one of the two sorts of contrast inevitably results from the other. Were it not for the great diminution of the shaft, the columns would appear to be too closely put together, and the intercolumns much too narrow, that is, according, at least, to the mode of intercolumniation practised by the Greeks in most of their structures in the Doric style; whereas such offensive appearance was avoided by the shaft being made considerably smaller at top than at bottom,—consequently the intercolumns wider above than below, in the same ratio; so that columns which at their bases were little more than one diameter apart, became more than two, that is, two upper diameters apart at the top of their shafts, or the neckings of their capitals. In this style everything was calculated to produce a character of majestic simplicity,—varying, however, or rather progressing, from heaviness and stern severity to comparative lightness of proportions,—for examples differ greatly in that respect: in some of the earlier ones the columns are not more than four diameters in height, while in some of the later they are upwards of six, which last-mentioned proportions not only amount to slenderness, but also destroy other proportions. The capital itself may be proportioned the same as before, relatively to the diameter of the column, but it cannot possibly bear the same ratio as before to its height. The average proportions for that member are one diameter for its width at its abacus, and half a diameter for its depth: consequently, if the entire column be only four diameters in height, the capital is $\frac{1}{8}$ th of it, or equal to $\frac{1}{7}$ th of the shaft; whereas, if the column be six or more diameters, the capital becomes only $\frac{1}{5}$ th of the column, or even less, so that the latter appears thin and attenuated, and the other member too small and insignificant. Yet

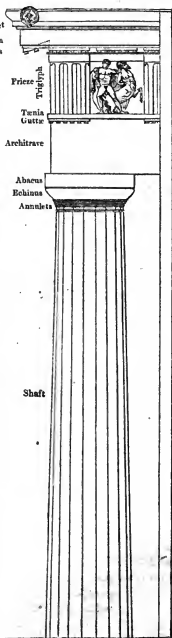
though the original Greek Order or style exhibits considerable diversity with respect to mere proportions, it was otherwise very limited in its powers of expression, and moreover something quite distinct from the nominal Doric of the Romans and the Italians, as will be evident when we come to compare the latter with it.

Before we enter upon this part of our subject, and previous to an examination of the details of the several Orders, it should be observed that the diameter, that is, the *lower* diameter of the column, is the standard by which all the other parts and members of an Order are measured. The diameter is divided into 60 *minutes*, or into two halves or *modules* of 30 minutes each; and those minutes are again subdivided into parts or *seconds* when extreme accuracy of measurement is required; which two last are noted thus: 5' 10", for instance, meaning five minutes and ten seconds.

DORIC ORDER.

It has been already observed, that in the genuine Doric the column consists of only shaft and capital, which latter is composed of merely an *echinus* and *abacus*, the first being a circular convex moulding, spreading out beneath the other member, which, although a very important one, is no more than a plain and shallow square block upon which the architrave rests,* not only firmly

* If we may venture to point out a resemblance that will be deemed not a little derogatory, though, nevertheless, indisputably exact, we may here observe that the shape of the Doric capital may be familiarly illustrated at the breakfast-table, by taking a common tea-saucer, and placing upon it a thick piece of bread, cut square to the diameter of the saucer. The similarity of forms is most striking; nor, were any convenience to be gained by it, would there be any great objection to distinguish capitals of that kind as belonging to the *saucer* class, for we make no scruple of applying the term *lancet* to one species of Gothic. Both in our own and other languages there are many architectural terms which, were they now brought up for the first time, might be objected to as being borrowed from very insignificant, if not also vulgar objects. In the architec-



and safely, but so that the utmost expression of security is obtained, and pronounced emphatically to the eye. Such expression arises from the abacus being larger than the *soffit* or under-surface of the architrave itself; and as the former corresponds, or nearly so, with the lower diameter of the shaft, it serves to make evident at a glance that the foot of the column is greater than the soffit of the architrave placed upon the columns. Thus, as measured at either extremity, the column is greater than the depth or thickness of the architrave, and projects beyond the architrave and general plane of the entablature. Now this would produce a most unsightly effect were the columns of the same, or nearly the same diameter throughout. In such case they would appear not only too large, but most clumsily so, and the entablature would have the look of being set back in the most awkward and most unaccountable manner. Instead of which, the architrave, and consequently the general plane of the whole entablature, actually overhangs the upper part of the shaft, in a plane about midway between the smallest diameter of the column, just below the capital and the face of the abacus. Even this, the overhanging of the entablature, would be not a little offensive to the eye, were the abacus no larger than the architrave is deep; whereas, being larger, it projects forwarder than the face of the architrave, thereby producing a powerful degree of one species of æsthetic effect, namely, contrast,—and if contrast, of course variety also; for though there may

tural terminology of the Spaniards, *naranja* (orange), or *media naranja*, is very commonly employed to signify a dome; in that of the French, *cul de four*, *anse de panier*, *œil de bœuf*, and many others of an exceedingly homely stamp, are quite current and accredited. In our own we have ‘saddle-backed,’ ‘cradle-vaulted,’ ‘horse-shoe arch,’ and several besides, which are more significant than elegant; and we even go so far as to distinguish one of the most elegant carved Greek mouldings by the name of the ‘egg and tongue.’ What harm, or what of insult, would there be in speaking of Doric capitals as those of the ‘saucer,’ and Corinthian ones as those of the ‘vase’ or ‘pot’ class?

be variety without contrast, there cannot be contrast without variety. Another circumstance to be considered is, that were not such projection beyond the face of the architrave given to the abacus, that and the rest of the capital could not correspond with the foot of the shaft, and thus equalize the two extremities of the entire column. As now managed, all contradictions are reconciled, and the different sorts of contrast are made to contribute to and greatly enhance general harmony. In the outline of the column we perceive, first, contraction,—then expansion, and that in both directions,—for in like manner as the column diminishes upwards and the capital expands from it, its shaft may be said to expand and increase in bulk downwards, so as to agree with the abacus or upper extremity.

Though a few exceptions to the contrary exist, the shaft of the Doric column was generally what is technically called *fluted*, that is, cut into a series of chanuels touching each other, and thus forming a series of ridges upon its surfaces,—a mode of decoration, we may observe, altogether the reverse of that which was practised by the Egyptians, some of whose columns exhibit, instead of channels or hollows, a series of convex mouldings that give them the appearance of being composed of very slender pillars or rods bound together. Many have attempted, with perhaps pains-taking but idle inquiry, to account for the origin of such fluting or channeling,—supposing, among other things, that it was derived from the cracks and crevices in the stems of trees, or from the streakings occasioned by rain on the shafts of the columns. Most perverse ingenuity! We do not find anything like such marked streakings on columns, even in this rainy English climate of ours; much less would they have been at all visible in such a climate as that of Greece. Others have supposed that these channels were at first intended to hold spears! that is, to prevent them from slipping and falling down when set up against a column; than which idea it is hardly possible for the utmost stretch of ingenuity to go further in absurdity.

We, who are less ambitious, content ourselves with supposing that the fluting of columns was introduced and adopted principally for the sake of effect. If other motives for doing so existed, we know them not, nor need we care, since study of effect alone suffices to account for such mode of decoration. By multiplying its surfaces, fluting gives variety to the shaft of the column, and prevents it from showing as a mere mass. With the same, or very nearly the same bulk and degree of solidity as before, it causes the column to appear much less heavy than it otherwise would do, and contributes to a pleasing diversity of light and shade, reminding us of Titian's 'bunch of grapes.' Being upon a curved surface, the channels serve to render the circularity of the column more apparent, since, though they are all of the same width, they show to the eye narrower and narrower on each side of the centre one,—no matter in what direction the column is viewed. Here then we have variety combined with uniformity, and a certain apparent or optical irregularity with what we know to be perfect regularity.

In the Doric Order, the number of channels is either sixteen or twenty,—afterwards increased in the other Orders to twenty-four; for they are invariably of an even number, capable of being divided by four; so that there shall always be a centre flute on each side of the column, that is, in a line with the middle of each side of the abacus. Doric flutings are much broader and shallower than those of the Ionic or Corinthian Orders;—broader for two reasons,—first, because they are fewer in number; and secondly, because there are no *fillets* or plain spaces left between them upon the surface of the shaft. Their proportionably much greater shallowness, again, may be accounted for equally well: were the channels deeper, not only would they seem to cut into the shaft too much, and weaken it, but also produce much too strong shadows; and another inconvenience would be occasioned, for the *arrises* or ridges between the channels would become very sharp and thin, and liable to be injured. The mode of

fluting Doric columns with mere arrises between the channels, instead of *fillets*, has been retained by the moderns as characteristic of the Order; but as the Order has been treated by them, it is little better than a mere distinction, with very little regard to general character. In the original Doric, almost every part is marked by breadth, or by flatness, or by sharpness. There are no curved mouldings or surfaces, except the *cymatium* of the cornice and the *echinus* of the capital, which last is generally kept exceedingly flat. The breadth and shallowness of the channels, and the flat curves in which they commence and terminate, are therefore in perfect keeping with the style in other respects; so also are the sharp arrises or ridges between the channels or flutings on the surface of the shaft, they being expressive of a severe simplicity. The same remark applies to the horizontal annular narrower channels or incisions immediately beneath the echinus of the capital, and lower down, which last are just the reverse of the projecting astragal or convex moulding given to the Doric capital by the moderns. Why such horizontal channels or grooves should have been cut in the very thinnest and weakest part of the column, where they diminish instead of adding to strength, it is not easy to say, except that they were merely for the sake of effect,—of producing shadow, and increasing the proportions of the capital, to which they seem to belong. We leave others, should any be so disposed, to object that the lowermost groove or grooves, as the case may be, give the capital the appearance of being a separate piece, merely joined on to the shaft, without such joining being concealed. Looking at it differently, we will rather say that such groove is intended to mark to the eye the commencement of the capital, the portion above it of the shaft being thereby converted into the *hypotrachelium* or necking of the capital itself, which is thus enlarged in appearance, without being actually increased, and rendered unduly heavy. It is not, however, every example of the Order that has such necking: while in some the groove separating the capital from

the shaft is diminished to a mere line,—which looks like a joining not intended to show itself,—in others it is omitted altogether. With respect to the *echinus*, we have little more to remark than that its office—which it performs admirably—is, by expanding out, to connect the diminished upper end of the column with the overhanging abacus; and the former being circular and the latter square, but adapted to each other in size, a beautiful combination is produced of a circle inscribed within a square; and the result is variety, contrast, and harmony. In its profile or *section*,—by which latter term is understood the contour of any moulding or other member,—it is usually very flat, little more than a portion of a cone (turned downwards), with scarcely any perceptible degree of convexity, except just beneath the abacus, where it is suddenly rounded and diminished, so that the abacus does not seem to press upon or compress it too much.

We arrive now at the entablature, the first or lowermost division of which, the architrave, otherwise called by the Greek name of *epistylum* (from *ἐπί* upon, and *στυλος* column), is no more than a plane surface whose height, including the *tænia* or fillet which finishes it and separates it from the frieze, is equal to the upper diameter of the column. Such, at least, may be considered its standard proportion, that by means of which it conforms to and harmonizes with the column itself. The second or middle division of the entablature, namely, the frieze, constitutes in the Doric style a very characteristic feature of the Order, being invariably distinguished by its triglyphs and metopes. The former of these are upright channelled blocks, affixed to or projecting from the frieze, and are supposed to have been originally intended to represent the ends of inner beams laid upon the architrave transversely to it. The *metopes*, on the contrary, are not actually architectural members, but merely the intervals or spaces between the triglyphs; so that without the latter there could not be the others, because it is the triglyphs which

produce the metopes. With slight variations in different examples, the frieze is of about the same height as the architrave,—a trifle less, rather than more; and the average proportion for the breadth of the triglyphs is the mean diameter of the column, or that taken midway of the shaft. The face of the triglyph has two *glyphs* or channels carved upon it, and its edges beveled off into a half-channel, thus making what is equal to a third glyph, whence the name triglyph, or *three-channeled*. We have till now reserved speaking of what, although it shows itself upon the architrave, belongs to the triglyph, and is in continuation of it, namely, the fillet and *guttæ* attached to the *tænia* of the architrave immediately beneath each triglyph, and corresponding with it in width. These small conical *guttæ* or *drops* are supposed, rather whimsically, by some to represent drops of rain that have trickled down the channels of the triglyph, and settled beneath the ledge of the architrave. Others suppose them to have been intended to indicate the heads of nails, screws, or studs. Leaving all such suppositions to those anile and, à-nous, very old-ladyish or very young-ladyish persons who have a taste for them, we will be satisfied with discerning artistic intention and æsthetic effect. That member of the triglyph—for such we must be allowed to consider it—is of great value, serving, as it does, to impart somewhat of decoration to the architrave, to break the monotony of the otherwise uninterrupted line of the *tænia*, and to connect, to the eye at least, the architrave and frieze together. Although in a much fainter degree, the architrave is thus made to exhibit the same system of placing ornamental members at regular distances from each other, as is so energetically pronounced in the frieze itself. If it be asked why the same, or something equivalent to it, was not extended to the architrave in the other Orders, our answer is, because a similar motive for doing it does not exist. The triglyph being suppressed in the Ionic and Corinthian frieze, the accompanying *guttæ* beneath it were of necessity omitted also, otherwise they would have made evident that the triglyph

ought to have been shown likewise. There is, indeed, one example, the monument of Thrasyllus, of a Grecian Doric entablature, whose frieze is without triglyphs (wreaths being substituted for them), and the guttæ are nevertheless retained. But how?—instead of being placed at intervals, as if there were triglyphs, they are continued uninterruptedly throughout, so that the idea of triglyph disappears; besides which the example here referred to is altogether so anomalous and exceptional as to be not so much a specimen of the Doric *Order* as of the Doric *style*, modified according to particular circumstances; on which account it is highly valuable, since we may learn from it that where peculiar circumstances required, at least admitted of, peculiar treatment, the Greeks did not scruple to avail themselves of the liberty so afforded.

With regard to the arrangement of the triglyphs, one is placed over every column, and one or more intermediately over every *intercolumn* (or space between two columns), at such distance from each other that the metopes are square; in other words, the height of the triglyph is the measure for the distance between it and the next one. In the best Greek examples of the Order there is only a single triglyph over each intercolumn, whence that mode is sometimes called *mono-triglyphic* or single-triglyphed intercolumniation; which is the closest of all, the distance from axis to axis of the columns being limited to the space occupied above by two metopes and two triglyphs, *i. e.* one whole triglyph and two halves of triglyphs. In such intercolumniation the number of the triglyphs is double the number of the columns, minus one. Further, it is evident that as there must be a triglyph over every column, the triglyphs must regulate the intercolumniation. The width of the intercolumns cannot be at all less than the proportion above mentioned; neither can it be increased, except by introducing a second triglyph,—and if a second triglyph, a second metope also, over each intercolumn, thus augmenting the distance between the columns to half as

much again, which becomes, perhaps, too much, the difference between that and the other mode being considerably more than the diameter of a column; whereas in the other Orders the intercolumnus may be made, at pleasure, either a little wider or a little narrower than usual. One peculiarity of the Grecian Doric frieze is, that the end triglyphs, instead of being, like the others, in the same axis or central line as the columns beneath, are placed quite up to the edge or outer angle of the frieze. In itself this is, perhaps, rather a defect than the contrary, although intended to obviate another defect—that of a half-metope or blank space there,—for it produces not only some degree of irregularity, but of æsthetic inconsistency also, the triglyph so placed being, as it were, on one side of, instead of directly over the column. One advantage attending it is, that the extreme intercolumns become in consequence narrower than the others by half a triglyph, and accordingly a greater degree and expression of strength are given to the extremities of a portico.

The Doric *Cornice*.—The third and last division of the entablature which remains to be considered is, although exceedingly simple, strongly characteristic, and boldly marked. With regard to its proportions, it is about a third or even more than a third less than the other two, and may itself be divided into three principal parts or members, viz. the *corona*, with the *mutules* and other *bed-mouldings*, as they are termed, beneath it and the *enithedas* above it. The mutules are thin plates or shallow blocks attached to the under-side or soffit of the corona, over each triglyph and each metope, with the former of which they correspond in breadth, and their soffits or under-surfaces are wrought into three rows of *guttæ* or drops, conical or otherwise shaped, each row consisting of six guttæ, or the same number as those beneath each triglyph. Nothing can be more artistically disposed; for in like manner as an intermediate triglyph is placed over every two columns, so is an intermediate mutule over every two triglyphs. The smaller members increase in number as they decrease in size;

and in the upper and finishing part of the Order, the eye is led on horizontally, instead of being confined vertically to the lines indicated by the columns below. The corona is merely a boldly projecting flat member, not greatly exceeding in its depth the abacus of the capital; in some examples it is even less. The epitithedas, or uppermost member of the cornice, is sometimes a cymatium, or *wavy* moulding, convex below and concave above; sometimes an echinus moulding, similar in profile to the echinus of the capital. The cornice may be said to be to the entablature, and indeed to the whole Order, what the capital is to the column,—completing and concluding it in a very artistic manner. By its projection and the shadow which it casts, the cornice gives great spirit and relief to the entablature, which would else appear both heavy and unfinished. In the horizontal cornice beneath a pediment, the epitithedas is omitted, and shows itself only in the sloping or *raking* cornices, as they are called, along the sides of the pediment.

Antæ.—Pilasters, as well as columns, belong to an Order, and in modern practice are frequently substituted indifferently for columns, where the latter would be *engaged* or attached to a wall. In Grecian architecture, however, the *antæ*—as they are thus termed, to distinguish them from other pilasters,—are never so employed. They are never placed consecutively, or in any series, but merely as a facing at the end of a projecting wall, as where a portico is enclosed at each end by the walls forming the sides of the structure, in which case it is described as a portico *in antis*. Although they accompany columns, and in the case just mentioned range in the same line with them, *antæ* differ from them, inasmuch as their shafts are not diminished; for which reason their faces are not made so wide as the diameter of the columns, neither are their capitals treated in the same manner, as both shaft and capital would be exceedingly clumsy. The expanding echinus of the column-capital is therefore suppressed, and one or more very slightly projecting *fasciæ*, the uppermost of which is

frequently hollowed out below, so as to form in section what is called the 'bird's beak' moulding, are substituted for it. In a portico *in antis* the want of greater congruity between the antæ and the columns is made up for by various contrasts. Flatness of surface is opposed to rotundity, vertical lines to inclined ones (those of the outline and flutings of the column), and uniformity, in regard to light, to the mingled play of light and shade on the shafts of the columns. Instead of attempting to keep up similarity as far as possible, the Greeks made a studied distinction between antæ and columns, not only in those respects which have been noted above, but carried difference still further, inasmuch as they never channeled the faces of their antæ, whereas the moderns flute their pilasters as well as columns. Hardly was such marked distinction a mere arbitrary fashion; it is more rational to suppose that it was adopted for sufficient æsthetic reasons and motives; nor is it difficult to account, according to them, for the omission of channeling on the shafts of antæ. Upon a plane surface the *arrises* between the channels would have occasioned an unpleasing harshness and dryness of effect, as is the case with fluted Doric pilasters, and would have been attended with monotony also, the lines being all vertical, and consequently parallel to each other; whereas in the column the channels diminish in breadth upwards, and all the lines are inclined, and instead of being parallel, converge towards each other, so that were the shaft sufficiently prolonged, they would at last meet in a common point or apex similar to that of a spire. Owing to this convergency, the lines on one side of a vertical line dividing the column, or rather a geometrical drawing or *elevation* of it, into two halves, instead of being parallel, are opposed to each other, like the opposite sides of an isosceles triangle; and this opposition produces *correspondence*.



PEDIMENT.—This very important feature of Grecian archi-

ture proves to us most convincingly that a figure which, considered merely in itself, is generally regarded as neither beautiful nor applicable to architectural purposes, may be rendered eminently beautiful and satisfactory to the eye. Reasoning abstractedly, it would seem that if such figure is to be made use of at all, the *equilateral* triangle would recommend itself in preference to any other, as being obviously the most perfect and regular of all triangles. For a pediment, however, such form would be truly monstrous; and yet even the equilateral triangle, nay, one of still loftier pitch, may, under some circumstances, become a pleasing architectural form, as we may perceive from pyramids and Gothic gables. How, then, is this seeming inconsistency or contradiction to be explained? It explains itself, if we merely reflect, as we ought to do, that in architecture, forms and proportions are beautiful not *positively* but only *relatively*. Were it not so, the same forms and proportions would be beautiful, and equally so under all circumstances, without any regard to purpose or propriety. It must also be taken into account that habit, custom, association of ideas, or prejudice, greatly influence our notions of architectural beauty. We are *prejudiced* in favour of the low Greek pediment, if for no other reason, because it is sanctioned by Greek authority and is according to Greek precedent. In all probability, had that people employed high-pitched instead of low-pitched pediments, we should, without inquiring further, have admired the former rather than the latter. What we have now to inquire is, why lowness of pitch for the pediment best agrees with the Greek system and its principles.

Notwithstanding that the pediment forms no part of the Order, since the latter is complete without it,—and in fact the pediment occurs only at the ends of a sloping roof,—the pediment must, when it does appear, be in accordance with the Order itself, or that front of the building which is beneath the pediment; consequently the pitch of the latter must be regulated by circumstances,—must be either greater

or less, according to the proportions of the front itself. So far from being increased in the same ratio, the wider the front,—the greater the number of columns at that end of the building,—the lower must the pediment be kept, because the front itself becomes of *low proportions* in the same degree as it is extended or widened. Under all circumstances, the height of the pediment must remain pretty nearly the same, and be determined, not by width or horizontal extent, but by the *height* of what is beneath it. The height of the pediment or its *tympanum* (the triangular surface included between the horizontal cornice of the Order, and the two *raking* cornices of the pediment) never greatly exceeds the depth or height of the entablature; for were it to do so, the pediment would become too large and heavy, would take off from the importance of the Order, and appear to load its entablature with an extraneous mass which it was never calculated to bear.

We hardly need observe that it was, if not a constant, a very usual practice with the Ancients to fill in the whole of the tympanum of the pediment with sculpture, and also the metopes of the frieze, whereby the latter, instead of being mere blank spaces between the triglyphs, were converted into highly ornamental features. As far as mere display is concerned, there certainly cannot be a better situation for sculpture on an imposing scale than is the pediment crowning a portico or similar façade. Nevertheless, it is not free from inconvenience, the triangular shape of the tympanum or space itself necessarily cramping the freedom of sculptural composition, inasmuch as in every case the general arrangement must be the same, with a central figure, and the others arranged symmetrically on either side of it, and the extreme ones being of necessity forced into crouching or recumbent attitudes, whether there be motive for them or not.* The sculpture in the pediment over the octostyle portico of the British Museum

* See art. 'Pediment,' Rudimentary Dictionary of Terms; Weale's Series.

is a less crowded composition than usual, and is remarkable as the first instance in this country of figures in full relief so applied, with a coloured background behind them; and further, having some of their attributes set off by gilding. But as no similar embellishment is applied to any other part of the architecture, the effect is so imperfect that it is difficult to judge what it would be, were such scheme of decoration to be fully carried out.*

MODERN DORIC.

Of the Roman and the modern varieties of this Order we shall treat much more briefly, because our remarks may be confined to comparison and the notice of differences. Certain it is that the original character of the Order was gradually lost sight of more and more, till at length it was converted into something quite different from its Greek type. The few circumstances in which Modern Doric, as we may call it, resembles the original one, are little more than the mode of fluting with *arrises* instead of fillets,—the general form of capital composed of echinus and abacus, and the triglyphs upon the frieze. The differences are, if not greater, far more numerous. The column became greatly elongated, being increased from six to eight diameters. The sunk annulets beneath the capital were omitted; and the capital was increased in depth by a distinct necking being given to it, divided from the shaft by a projecting moulding, which in that situation is called an *astragal*. The abacus, too, is made shallower, and has mouldings added to it. One of the greatest changes of all, as far as the column is concerned, is the addition of a base to it, which is partly both consequence and cause of the greater slenderness of the shaft; for were the shaft not reduced in

* One preposterous mode of disposing small statues or figures is of frequent occurrence in Gothic architecture, viz. that of placing a succession of them within the arch mouldings of the head of a doorway or portal, so that, although intended to represent upright attitudes, the uppermost ones become placed nearly horizontally.

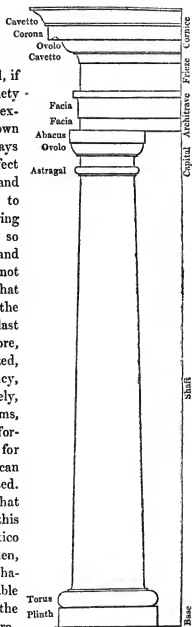
its lower diameter,—which is the same as being made more diameters in height,—the base added to it would enlarge the foot of the column too much : so again, on the other hand, were only the shaft decreased in thickness, without any mouldings for a base being added to it, that end of the column would be as much too small. The base best adapted to the Order, as being the most simple, though not uniformly made use of, is that which consists of merely a *torus*, or large circular and convex-sided block, and two shallow fillets above it. It may here further be noticed, that besides the base itself, or the base *proper*, the moderns have, for all the Orders alike, adopted an additional member, namely, a rather deep and square block, which, when so applied, is termed a *plinth*; and beneath this is frequently placed another and deeper one, called a *sub-plinth*. Contrary as this is to the practice of the Greeks, it is by no means an unwarrantable licence, for had no greater liberty been taken with the Orders and the modes of applying them, they would have remained comparatively quite pure. In apology for the plinth beneath a base, it may be said to produce a pleasing agreement between both extremities of the column,—in the Doric Order at least, where the square plinth beneath the circular torus of the base answers to the square abacus (which is itself another plinth, though differently named) placed upon the circular echinus of the capital.

Passing over several particulars which our confined limits will not permit us to notice, we may remark, that if greatly altered, not to say corrupted, from its primitive character, the Doric Order, as treated by the moderns, has been assimilated to the other Orders,—so much so as, though still differing from them in its details, to belong to the same general style. One advantage, if no other, of which is, that it may, should occasion require, be used along with the other Orders; whereas the original or Grecian Doric is so obstinately inflexible that it cannot be made to combine with anything else, or to bend to modern purposes. So long as a mere portico or

colonnade, and nothing more, is required, backed by a wall unperforated by windows, its character and characteristic system of intercolumniation can be kept up, but no longer; or if it is to be done, it is more than has yet been accomplished. Nothing could be more preposterous, or show greater want of proper æsthetic feeling, or greater disregard of æsthetic principles, than the attempt to combine, as was done by Nash in the Park façade of Buckingham Palace, a Grecian Doric Order with a Corinthian one (in lieu of which we have now got a design *secundum artem*, i.e. manufactured to order, and showing consummate talent for architectural bathos, if no other). So totally irreconcilable are the two *styles*, that it was like placing Tudor or florid Perpendicular Gothic upon the early Lancet style. Besides, in that instance, the Doric, though affecting to be Greek, was depraved most offensively, as may still be seen in what is now left in the two low wings, the architrave and frieze being thrown together into one blank surface.

TUSCAN ORDER.

THIS, as already stated, is not entitled to rank as a distinct Order, being, in fact, nothing more than a simplified, if not a spurious and debased variety of the Doric. No authentic examples of it exist: it is known only from what Vitruvius says of it, following whose imperfect account, modern writers and architects have endeavoured to make out something answering to it. Yet what has been so produced is to all intents and purposes Doric,—though not Grecian Doric,—excepting that the shafts are unfluted and the frieze quite plain; which last circumstance, and much more, as has just above been intimated, is a mere trifling discrepancy, since not the triglyphs merely, but the frieze may, it seems, be omitted without thereby forfeiting the character of Doric for the Order. Though the Tuscan is spoken of, it is not practised. Almost the only example of what is called by that name in this country is Inigo Jones's portico of St. Paul's, Covent Garden, which, though not devoid of character and effect, is remarkable chiefly for the great width of the intercolumns, and the great pro-

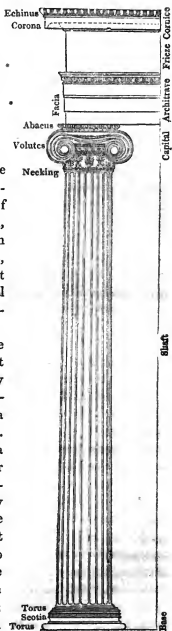


jection of its very shallow, and therefore too shelf-like cornice, which, if no other part, must be admitted to differ widely from the comparatively slightly projecting and massive Doric cornice. The Tuscan has, however, been treated differently by different architects, and some of them have given it what is merely a modification of the Doric cornice without its mutules. Their Tuscan becomes, in fact, very little more than a plainer sort of their own Doric, distinguished from it chiefly, and that only negatively, by the omission of triglyphs on the frieze. One thing which the Moderns have done, both in their Doric and their Tuscan, is to assimilate pilasters to columns, giving to the former precisely the same bases and capitals as the others have, and also generally diminishing their shafts in the same manner. Still all the differences here pointed out, together with many minor ones besides, do not constitute different Orders, unless they are to be multiplied by being subdivided into almost as many distinct Orders as there are varieties of one and the same class. All the Dorics and the Tuscan agree in having the *echino-abacus capital*. Therefore, if we want a quite different and distinct Order, we must turn, as we now do, to the *volute-capital* class of columns, or that which bears the name of the

IONIC ORDER.

How this Order originated,—what first led to the adoption of volutes as a suitable decoration for the capital,—whether they were mere decoration, or were at first intended to express some meaning,—whether they were intentionally devised for the latter purpose, or grew out of some accidental hint,—must now be entirely matter of conjecture. Of one thing we may be quite certain, that the Order, as we now find it in the best, and best known, examples, was not struck out all at once, but must have passed through several stages till it was ultimately matured into perfection.

Although the capital is the *indicial* mark of the Order,—that by which the eye immediately recognizes and distinguishes it,—the entire column is of quite a different character from the Doric. Besides having the addition of a base, the shaft is of more slender or taller proportions, and consequently made much less visibly tapering; for if it diminished in the same degree as the Doric shaft does,—the Ionic being about two diameters longer,—the upper one would, in consequence of such tapering, become much too small; and a further consequence would



be that the foot and base of the column would appear much too large, — perhaps clumsily so. Not knowing expressly to the contrary, we are at liberty to suppose that it was the altered form and character of the capital itself which first led to the formation of a base or series of mouldings at the bottom of the shaft, in order to produce such degree of finish below as would correspond with and *balance* the richness and flow of outline given to the capital. And it must be allowed that the swelling contours of the base are admirably in keeping, and harmonize with the play of curves in the volutes; whereas, were the shaft to stand immediately upon the floor or pavement without any base, as in the Doric Order, although such treatment is in perfect correspondence with the character of that echino-abacus Order, it would be just the reverse in the *voluted* one. There would be a harshness and abruptness below, in grating discord with the graceful flow of lines in the capital above. This feeling dictated the necessity for a corresponding base, which, although generally spoken of as an addition *to* the shaft, may with far greater propriety be said to have been *taken out of* it. Any actual addition to the foot of the shaft would have been the same as an enlargement of it, producing disproportion and therefore deformity. The most rational explanation therefore is, that the original diameter for the foot of the shaft was retained, but the foot itself shaped into mouldings, and the portion immediately above it pared away or reduced, so that the column became more diameters in height than before. That being done, and a distinct base so obtained, it was found necessary to make a further change, for the sharp arrises of the Doric mode of fluting occasioned a degree of harshness quite at variance with the greater delicacy aimed at in other respects. Those arrises were accordingly converted into *fillets*, which are not actual members, but merely spaces left between the channels or flutes themselves, which last are consequently narrower than in the Doric column; and their comparative narrowness is further increased by their being augmented in number, from that of

twenty to twenty-four. Thus the change from the Doric to the Ionic column may be accounted for, rationally at least, and æsthetically, if not historically. We do not, indeed, profess to know and determine the actual origin of the volutes of the capital, and therefore leave those who put faith in Vitruvius to believe, if they can, that they were derived from the imitation of the curls in a lady's head-dress; or, as others will have it, that the idea was borrowed either from rams' horns, or the slender and flexible twigs of trees placed upon the capital for ornament. We also leave those who are not satisfied with our way of accounting for the base given to the Ionic column to fancy that this member was intended to imitate the ancient *chaussure* or sandal.

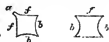
The Ionic capital is far more complex than that of the Doric, and not only more complex, but more irregular also: instead of showing, like the other, four equal sides, it exhibits two faces or fronts parallel to the architrave above it, and two narrower *baluster* sides, as they are termed, beneath the architrave. Some consider this irregularity a defect, which, if such it be, is to be got over only by either turning the volutes diagonally, as in some Roman and modern examples, or by curving concavely the faces of the capital, instead of making them planes, so as to obtain four equal faces or sides, as is done in the capitals of the inner Order of the Temple of Apollo at Bassæ. At least that method, and the other one of turning the volutes diagonally, are the only methods that have been practised for giving perfect regularity to the Ionic capital by means of four equal faces; for, although difficult, it is possible to accomplish the same purpose differently, by making the abacus quite square, as in the Doric Order, and letting the volutes grow out of it on each side or face, their curvature commencing not on the upper horizontal edge, but descending from the vertical edges of the abacus. In fact, the volutes might be fancied to have originated in a prolonged abacus, first falling down on each side beneath the architrave, and then coiled up on the back and front of the column for the two

faces, which thus became greater in width; after which a smaller ornamental abacus was introduced as a crowning member, immediately beneath the architrave. As it is now treated, the great extent of the two flat voluted faces prevents the capital from being square. Let us endeavour to explain this: as average measurement, we may put down 50 minutes, or 10 less than the lower diameter, for that of the upper diameter of the shaft; 65 for the sides of the abacus; from 56 to 60 for the soffit of the architrave, which last accordingly overhangs the upper part of the shaft; and 90 minutes, that is, three modules, or a diameter and a half, for the faces of the capital, measured across the volutes. Now, were the capital square—as deep from back to front as it is wide in front,—its bulk would be excessive, and out of proportion with the column and other parts of the Order, and inconsistent with the delicacy aimed at in all respects. The mere *lateral* expansion of the capital, on the contrary, as viewed in front, does not occasion any appearance of heaviness,—rather that of richness; more especially as the bulk is greatly diminished by the following ingenious expedient. Instead of the *baluster side* being made cylindrical by being kept of the same diameter throughout, and equal to the face of the volute, it is gradually diminished from each face; so that the side of the capital thus becomes in a manner hollowed out; and not only that, but great play of form is imparted to it, and its curvature both contrasts and harmonizes with the curves of the volutes themselves. If there be not the same completeness with respect to uniformity in all the four sides as is obtained in the Doric and Corinthian capitals, at any rate the most admirable artistic contrivance and propriety are exhibited. Nevertheless, a writer of some notoriety, viz. Mr. John Ruskin, calls the Ionic capital ‘a base invention;’ yet as he sees perfect loveliness in those two Hecubas of architecture, St. Mark’s Church and the Ducal Palace, at Venice, his equally unqualified and dogmatic censure of the Greek voluted capital partakes more of compliment towards it than it does of insult.

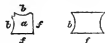
The only thing to be objected against the Ionic capital is, that in the end columns of a portico the form of capital just described occasioned obvious if not offensive irregularity, because on the return or side of the building the baluster side showed itself beneath the face of the architrave : yet even this was of little consequence if there was merely a single row of columns in front ; but where the colonnade was continued along the flanks of the building also, a very unsightly sort of irregularity was produced ; for while all the other columns on those flanks showed the faces of their capitals, the end one would show its baluster side. Here then a difficulty presented itself that demanded some ingenuity to overcome it, and hardly can we sufficiently admire the happy expedient by which it was surmounted. It was necessary to give the capital at the angle two adjoining voluted faces, so that it should agree with those of the other columns both in front and on the flank of the building. This was accordingly effected by placing the volute at the angle, diagonally, so as to obtain there two voluted surfaces placed immediately back to back,—a most happy and simple contrivance, which, now that it has been applied, every one is at liberty to fancy he could have found out for himself. Nevertheless it is not every one that approves of it, for there are some who affect to regard that disposition of the volute at the angle as a defect. If it be strictly considered merely in itself, it may, perhaps, be objected to such capital that in itself it is irregular, one of the volutes in each of its faces being turned obliquely and foreshortened, while the other volute in the same face is seen directly in front, as in all the other capitals. Yet surely such partial and trifling irregularity may very well be excused, instead of being imputed as a defect, since it obviates far greater irregularities, and contributes so effectively to general harmony and symmetry. At all events, it is incumbent upon those who make the objection to show how much better they could have managed matters. So far are we from objecting to it, that we do not see why the same diagonal disposition of the

volute should not, *occasionally* at least, be employed for all the capitals alike, thereby giving them, although in all other respects perfectly Greek as to style, four uniform faces, as in some of the Roman and Italian examples of the Order.

How little modern Architects are capable of modifying the Ionic capital, and adapting it to particular circumstances, may be seen in the colonnades of the façade of the British Museum, where, at the re-entering or internal angle formed by colonnades at right angles to each other, the column at the angle has two adjoining voluted faces given to it; but as a re-entering or inner angle is circumstanced quite differently from an external one, the consequence is that each of those faces falls opposite the baluster side of the columns ranging with it either way. We explain this briefly in two simple diagrams, in which *f* indicates the face or voluted side of the capital, *b* the baluster side, and *a* the projecting volute turned diagonally at the angle.



In an external angle, or the return of a portico, the faces and sides are arranged thus, so that *b b b b* come opposite each other; but in an internal or re-entering angle, the reverse takes place; for we have then this disposition of the faces and sides of the capitals, in which a voluted face comes opposite to the baluster side of the next capital,—a most unsightly irregularity, and one all the more unpardonable because it could have been got over, if in no other way, by converting that column (*a*) into a square pillar, which would, besides, give greater strength, or the expression of it, where such expression is very desirable.

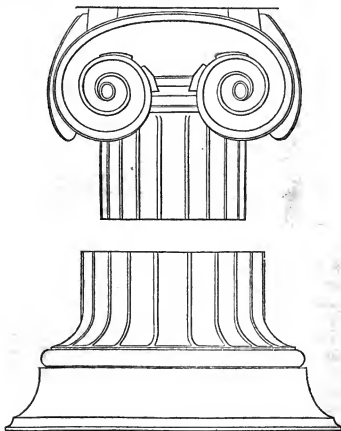


If these observations on the Ionic capital seem to detain us too long, we cannot help it: they are nothing less than indispensable for a proper understanding of its nature, and the peculiarity of circumstances attending it. What remains to be observed is, that owing to its com-

plexity, that capital admits of very great diversity of character and decoration. It is sometimes without, and sometimes has a necking to it, which may either be plain or decorated, as may best accord with the particular expression, either as to richness or quiet simplicity, which is aimed at as the characteristic of the entire design. The capital may be modified almost infinitely in its proportions; first, as regards its general proportion to the column; secondly, as regards the size of the volutes compared with the width of the face. In the best Greek examples the volutes are much bolder and larger than in those of the Roman and Italian, in some of which they are so greatly reduced in size, and become consequently so far apart from each other, as to be insignificant in themselves, and give the whole capital an expression of meagreness and meanness. The *spirals* forming the volute supply another source of variety, since they may be either single or manifold. In what is called the Ilissus Ionic capital there is only a single spiral, or *hem*, whose revolutions form the volute, which mode, indeed, prevails in all the Roman and modern Ionics; but in the capitals of the Temple of Erechtheus at Athens, there are, besides that principal spiral, other intermediate ones which follow the course of its revolutions. Again, the *cathetus*, or eye of the volute, where the spiral or spirals terminate, admits of being made smaller or larger. It is, besides, sometimes flat, sometimes convex, and occasionally carved as a *rosette*. All these variations are independent of the general composition of the capital, and though not all equally good, they both suggest and authorize other modifications of the Ionic type, and fresh combinations.

One exceedingly interesting example, highly valuable as suggestive study,—one quite *sui generis*, and perhaps on that account viewed with more of prejudice than relish,—is the internal Order of the Temple of Apollo at Bassæ, delineated and described by Mr. T. L. Donaldson, in the supplementary volume to Stuart's 'Athens.' This example, which seems to have found favour only in the eyes of Mr. C. R. Cockerell, who has employed it on more than one occasion, has, as already inti-

mated, four similar faces; yet if it so far agrees with many Roman and modern Ionic capitals, it differs from them totally in every other respect. While the faces of the latter are formed rather by merely *sticking on* the volutes diagonally, instead of *turning* them, so in the example now under notice each face may be said to be arched, since it curves downwards on each side from the middle of its upper edge, instead of being there straight or horizontal beneath the architrave.



Owing to this circumstance the faces of the capital have the look of being rather affixed to than properly connected with

the abacus, and there is a certain degree of incongruousness and want of finish. So far, then, there is room for improvement, and perhaps in some other respects also; yet upon the whole there is much to approve of and admire in this capital, among whose peculiarities it deserves to be noted that the space between the volutes is not above half the width of the volutes themselves. Nor is it for its capital alone that this example of the Order is remarkable, its base being equally peculiar, on account of its simplicity of form, and still more so, perhaps, on account of its very great expansion, spreading out below to considerably more than two upper diameters of the shaft; which perhaps causes the capital to appear rather too small in comparison with it. This base is all the more remarkable because it differs entirely from what is called the *Ionic base*, although not employed by the European Greeks for that Order, who made use of what is styled the *Attic base*, consisting of two *tori* and a *scotia*, or deep curved hollow, between them. The proper Ionic base, or what is so called, differs from every other form of that member, being greatly contracted in its lower mouldings, which, if not a deformity, is not a particular beauty, as it gives the base too much the appearance of being reversed or turned upside down; and hence it is difficult to assign any probable or sufficient motive for such conformation of mouldings in the foot of a column. Perhaps the only modern instance of the application of that base occurs in the *tetrastyle* (*four-columned*) portico of Hanover Chapel, Regent Street, whose Order is copied from the Temple of Minerva Polias at Priene, in Asia Minor; to which example we shall presently have occasion to refer again when we come to speak of the Ionic entablature. Before so doing we have to call attention to another peculiarity in the columns within the Temple at Bassæ, whose base is above shown: we allude to the mode in which the shafts are fluted, which seems to indicate a transition from the Doric to the Ionic style, the fillets being exceedingly narrow, and the channels shallow and very slightly curved, which gives the shaft

altogether a different character from that attending the usual mode of fluting practised for this Order.

Although it is a modern composition, derived from the study of Greek fragments, yet certainly not on that account the less meritorious than if it were an express copy from some one particular example, we may be allowed to speak of the Order, or rather the columns of the *hexastyle* (six-columned) portico of the Church in Regent Square, Gray's Inn Road, erected by Mr. Inwood, soon after the completion of St. Pancras' Church, whose portico so admirably exemplifies the florid and elaborately wrought Ionic of the Temple of Erechtheus at Athens. The columns of the Regent Square Church,—and it is on account of the columns *alone* that we allude to it, the structure being otherwise quite unworthy of notice,—differ from all other known examples; not only in their bases and capitals, but also in the very peculiar mode of fluting, or rather *striating*, employed for their shafts. Not having detailed drawings, or any drawings at all to assist us, we cannot pretend to enter into description, but can only say that base, shaft, and capital are unlike all received examples, and at the same time so well adapted to each other as to produce artistic unity and consistency of character; and that character is stamped by *breadth* and simplicity. With respect to the fluting, it partakes of what may be called *striating*, the fillets showing themselves rather as narrow surfaces raised upon the shaft, than the channels as positive hollows between them. The capital is at once graceful and simple, and derives much of its peculiar character from the enlarged eye of the volute, which is occupied by a rosette ornament.

Interesting as it would be to particularize other examples, we cannot do so here, which is the less to be regretted because mere verbal remarks, unaccompanied by drawings on such a scale as to fully show all their minutiae, would not be very satisfactory. Perhaps we shall be thought to have already dwelt rather too long on the mere column, for we have not

yet quite done with that part of the Order. It remains, however, to be observed, that notwithstanding its situation is such as to render detail there hardly noticeable, the baluster side of the capital was always enriched. In Greck examples it had a series of wide channels with broad fillets between them, and where great richness was affected, as in the Ionic of the Temple of Erechtheus, the fillets had an additional moulding upon them, carved into beads. In the Asiatic examples, on the contrary, and Roman ones also, the baluster side is usually cut into the form of leaves, bound together, as it were, in the centre by a broad moulded ring, which produces an exceedingly good effect; and indeed, in several instances, much better taste is manifested in that obscure part of the capital than in the face itself.

Although it is repetition to say that the base usually given to this Order by the Greeks was the *Attic* one, consisting of two *tori*, divided by a *scotia*, we here refer to that part of the column again for the purpose of noting a species of enrichment applied to it, the upper torus being sometimes fluted horizontally, at others cut to resemble an interlaced chain-like ornament, now called a *guilloche*. Modern Architects, however, invariably leave the upper torus of the base quite plain, even when they scrupulously copy every other part of the column. The only instance of channeling upon the upper torus, to which we can point, is that of the portico of St. Pancras' Church, which building well deserves to be carefully examined and studied by those who would acquire a correct idea of the exquisite finish and richness of Grecian Ionic details, and their effect in execution. But, unfortunately, like the one in Regent Square, that building too is not at all felicitous as a general composition.

For Ionic Antæ a few words will suffice. Without exactly agreeing with that of the column, the base does not differ very materially from it, except, indeed, in the Ilissus example, where it is lower than the other, and consists only of a shallow scotia with a channeled torus above it. In the Erechtheum

example it is distinguished from the column base chiefly by both lower and upper torus being channeled. The capital, or, as it is more commonly termed, *anta-cap*, on the contrary, is differently shaped from that of the column, in consequence of having no volutes; wherefore it is not by any means so wide, neither is it so deep. The mouldings, too, though of the same character, are differently disposed. Still the anta-cap corresponds with the capital as to plainness or enrichment,—its mouldings being either carved or not, as those of the latter happen to be; and if the capital has an ornamented necking, so also has the anta-cap. One singularity in the treatment of Ionic antæ, is that the face of the anta has in some cases a slight break down the middle of it, which causes it to appear composed of two very narrow faces put together side by side, but not exactly *flush* with each other. This kind of antæ, in imitation of those of the Erechtheum—perhaps the only precedent for it—has been adopted for St. Pancras' Church. What could have led to it is rather difficult to conjecture, since there does not appear to be any adequate motive for it, or any purpose gained by it.

IONIC ENTABLATURE.—As expressed in the terms of the diameter of the column, that is, measured by it, the entablature exceeds that of the Doric Order. In the Parthenon the entire height of the entablature is not more than 2 diameters; while in the Ionic it is 2 diameters and 17 parts, or the third of a diameter more; whereas it would seem that the Ionic column being much slenderer, the entablature ought to be less in height than the Doric one, instead of being more. And so it is, and less in a considerable degree, since it is the height, not the diameter, of the column which regulates the height of the entablature; in other words, the height of the latter must be in proportion to that of the former.* Now $2\frac{1}{3}$ diameters

* The necessity for agreement in this respect between the column and its entablature will be rendered apparent by the preposterous effect produced in two instances where the columns have been prolonged to an absurd height without the entablature being deepened in the same degree;

for the entablature is much less in proportion to a column 8 or 9 diameters high, than 2 diameters for the entablature is to one that is only 6 diameters high. In the latter case the entablature is equal to one-third of the column, and one-fourth of the whole Order; but in the other, $2\frac{1}{2}$ diameters amount to only a fourth, or thereabouts, of the height of the column, and consequently to only about a fifth of the entire Order.

The Ionic *architrave* does not differ materially from that of the Doric. Its average or standard height is the upper diameter of the column. In the plainer examples of Ionic, such as the Ilissus one, the face of the architrave is quite plain, as in the preceding Order, and distinguished from it only by the Doric *tænia* being converted into a moulding of a plain bead and small echinus, surmounted by a narrow *tænia* or broad fillet. In more decorated examples, as that of the Erechtheum, the face of the architrave is divided into three surfaces or courses, called *faciæ*, which very slightly project before or overhang each other, and the moulding between the architrave and frieze is increased in depth; there is a greater number of mouldings, and some of them are enriched by being carved, or, as it is termed, *cut*.

As to the Ionic frieze, triglyphs being discarded for it, and no other characteristic members substituted for them, it becomes no more than a plane surface interposed between the architrave and cornice, unless—as is now never done, although it was, in all probability, generally done by the Ancients—it is enriched with figures in bas-relief or other sculpture. Yet as *mere* sculpture of that kind, however essential to effect, is not taken into account, or considered to belong even to the character of an Order, but to be something quite extraneous that may either be introduced or omitted at

namely, the portico of the Admiralty, and that within the court of Furnival's Inn; the first of which is bad enough, the other far worse in every respect.

pleasure, it is omitted accordingly; whereby the frieze is reduced to a mere blank surface, which leaves nothing more to be said concerning it.

The Ionic cornice affords but little scope for further observation, more particularly in the Athenian examples, in which it consists of little more than the *corona* and cymatium above it, and some narrow *bed-mouldings* beneath the former member, partly got out of its hollowed soffit or under-surface. Consequently the whole cornice looks rather meagre and poor, especially if the richer form of capital with a necking to it be employed for the columns. In such case there is no corresponding degree of richness and increased importance in what is, nevertheless, the completing member or division of the entire Order, and ought accordingly to be treated as such. On this account we hold the cornice of the Erechtheum example to be very unsatisfactory, and to derogate from what is the character of the Order in all other respects: while the capital is particularly ornate, luxuriant, and complicated in design, the cornice, which, as has been before remarked, is to be considered as the capital of the entire Order, is particularly simple and severe; and owing to the want of a sufficiency of bed-mouldings beneath it, the corona appears to jut out too abruptly immediately over the frieze, without due preparation for it. Were the frieze sculptured, such enrichment would, perhaps, without anything further, confer an adequate degree of ornateness upon the whole entablature, and bring it into keeping with the highly finished columns. If, on the contrary, the frieze is to be left plain, the best way would be to reduce its height a little, and perhaps that of the architrave also, and enlarge the cornice by introducing *dentels* into it. These last-mentioned members—which, although considered by modern writers to be characteristic of the Ionic Order, and to be to its cornice what *mutules* are to the Doric, and *modillions* to the Corinthian, do not appear to have been so regarded by the Greeks themselves—consist of a series of narrow upright blocks (supposed to represent the ends of joists), placed closely together, so that

the spaces between them, which are only about half as wide as the blocks themselves, appear to *indent* that portion of the cornice, which, when introduced without being so ornamented, is called an uncut *dentel band*.

The Priene example, to which we referred when speaking of Ionic bases, offers what, in our opinion at least, is a far better model for an Ionic cornice than that of the Erechthcum, and which, with perhaps some modification of it, might very well be applied to the more florid Athenian Order; and though to do so would be contrary to *precedent*, that would matter little, so that the change itself were in conformity with artistic effect and æsthetic principles.

The Temple of Jupiter at Aizani in Asia Minor exhibits a remarkable example of the Ionic Order, the details of which were recently published, for the first time, by M. Texier. In its general conformation the base resembles the Priene example, but the entablature is quite different. The architrave is divided into three *faciæ*, separated by a cut moulding; and the upper *facia* is surmounted by an exceedingly deep and highly enriched course of mouldings. The frieze, too, is ornamented in a very unusual fashion, acanthus leaves being placed upon it at intervals, somewhat after the manner of triglyphs, and connected together with scrolls. The cornice has both *dentels* and *modillions*, and a narrow *corona*, but a deep *cymatium* or *epitithedas*, enriched with carving.

We will not pursue our notice of the Greek or Ancient Ionic any further, but here conclude with observing that notwithstanding its decided superiority to the Roman, &c., more especially in its capital, it has not been adopted by the Italian and French Architects of the present day. In this country, on the contrary, the Greek Ionic has been employed almost to the entire exclusion of the other, from the time of its being first made known to us by means of Stuart and Revett's 'Antiquities of Athens,' and the 'Ionian Antiquities;' to which publication may be added the 'Unedited Antiquities of Attica,' which contains other specimens of the

Order, found at Eleusis, remarkable for their refined simplicity and also their gracefulness. Not the least important lesson to be derived from these and similar publications is, we permit ourselves to say, the learning from them that the Greeks treated their Orders with artistic spirit and freedom, conforming to a certain type or general standard for each, but varying their details and modifying their proportions.

For examples of Grecian Doric and Ionic which may be seen in London, and which the student would therefore do well to look at and carefully examine for himself, since he will from these learn more than he possibly can do from books alone, we refer to the following buildings; for Doric, the *tetrastyle* portico of Covent Garden Theatre, and the *hexastyle* one of the Colosseum in the Regent's Park; which latter shows the Order to much greater advantage than the other, owing to its being free from such disturbing and very un-antique additions as doors and windows within it, which inevitably destroy all breadth and repose;—it has also the advantage of a west aspect, by which the full effect of light and shade is produced. For Ionic examples, we refer to St. Pancras' Church, New Road, whose order is a faithful transcript from that of the Erechtheum; the same building also affords an instance of the application of a caryatid order of female figures in the porch, or rather the porch-like structure, on its north and south sides,—the idea of which is taken from a similar small structure attached to the Athenian Temple;—the University Club House, Pall Mall East, where the same Order is applied upon a much smaller scale, and raised upon a basement floor;—the Chapel in South Audley Street;—the portico of the Post Office, and the façade of the British Museum;—the portico of the College of Surgeons, Lincoln's Inn Fields, whose columns, proportioned according to the Ilissus example, were originally plain, but were fluted, and the mouldings of the entablature cut, when the building was altered and greatly improved some years ago, by Mr. Barry;—the portico of Hanover Chavel Regent Street, which, as the

reader is already aware, shows the Priene Ionic;—and lastly, for we will not further extend this list, the portico of the India House, Leadenhall Street, which is remarkable for its frieze being sculptured, and its pediment also filled in with figures in relief. Of similar decoration for the Doric Order we cannot point out any instance here, both the metopes of the frieze, and the pediment, being left plain in all our English specimens of that Order, and in every one of our so much vaunted examples ‘after the Parthenon,’ produced during the Greek mania and mannerism.

ROMAN AND MODERN IONIC.

To elucidate this part of our subject at all satisfactorily would require a great number of drawings; accordingly we must make shift as well as we can without them, leaving the student to turn to other works for examples,—should he, as we trust he will, have imbibed from our remarks any relish for the study of the Orders by accurate comparison of various examples of one and the same Order. Neither the Romans nor their modern successors appear to have comprehended the genius of the Ionic Order any more than of the Doric. Their best imitations, both of the one and the other, were of but a bungling kind. They certainly had no great affection for either, for we find comparatively very few instances of them in Roman remains. As treated by them, the Ionic capital was not only greatly impoverished, but deformed also,—impoverished by the volutes being greatly reduced in size, and consequently in importance also, as characteristic marks of the Order,—and deformed, owing to the tasteless treatment of it in other respects. Instead of the gracefully flowing *festoon* hem, or mouldings over the echinus, which seems to connect the two volutes or sides of the face of the capital together, there is a straight line without any moulding to it, and the echinus, projecting before it, produces an appearance of clumsiness—of the several members not being properly adjusted to

each other. As in all the Greek examples, the echinus of the capital, which passes behind the volutes, is invariably carved with that sort of pattern which workmen call 'eggs and darts,' *ova* or egg-shaped ornaments, almost naturally resulting from the contour of the moulding before it is cut; and the echinus of the Ionic, being always so carved, is on that account distinguished by the name of *ovolo*,—not because its section or profile is any portion of an oval or elliptic curve; for among other things the Roman style differs from the Greek in having all its mouldings, both convex and concave, formed of portions of circles, by which its details become less elegant in contour. Such minutiae as mere mouldings are, however, matters of quite secondary consideration in comparison with composition and general effect. Though we cannot enter into such niceties in a mere rudimentary work, they certainly ought to be duly attended to; yet to do so 'duly' is very different from doing so exclusively, and, as it would seem, without taking any account of, or else in utter ignorance of, greatly more important artistic requisites. There has been too much of plodding microscopical criticism with regard to mouldings and other details, looked at and exhibited individually and fragmentarily—which is almost as much as to say, prosaically also. The botanist examines his specimens through a lens, one by one, but the eye of the artist grasps and comprehends a landscape at a glance.

Even in the best Roman and modern examples, the volutes are decidedly inferior to Greek, being comparatively tame and meagre, yet coarse also. Italian Architects have sometimes made them so small and insignificant that they give scarcely any character to the capital, or render it distinguishable, at a little distance, from the Doric, its general mass being no greater. The spiral makes fewer revolutions, and the *hem* or moulding which forms it is flat, as is also the interspiral or general surface of the volute, which has never any secondary spirals upon it, though that and the *intervolute* are sometimes enriched with foliage.

Of the Roman Ionic Order, as a whole, we know very little, there being only three accredited examples of it, viz. the Theatre of Marcellus, the Temple of Fortuna Virilis, and the Temple of Concord. Of the first of these, the capital is the simplest and plainest, and also the smallest in its proportions; that of the second is by very far the best, its volutes retaining most of the Greek character; and that of the third is remarkable, if not for its ugliness in other respects, for its volutes being turned outwards diagonally, so as to present four equal faces,—a mode afterwards *re-invented* and brought up as a novelty by Scamozzi, in honour of whom it has since been distinguished by the name of the Scamozzi capital. But if there are few ancient buildings remaining of the Roman Ionic Order, there are numerous detached specimens of it in antique columns that have been preserved by having been made use of in other buildings, or deposited in collections of sculpture. Many of these have been delineated and published by Piranesi and others; and they are so numerous and so varied that we cannot pretend either to classify them, or to particularize even the principal ones. All that we can here say is, that although they fall far short of the refined taste exhibited in Greek examples, some of them possess considerable merit, and supply ideas for other and better varieties. They also serve to convince us that, like the Greeks, the Romans did not abide by a single stereotype pattern for each Order: the attempt to establish such uniformity and conformity to rule was reserved for the Palladios and Vignolas of the 16th century, who established the orthodoxy of routine, and carefully trained-up dulness.

There is a fine antique example of the kind in the British Museum, in which the volutes are placed diagonally, and beneath each face of the capital there is not a mere flat mask, but a head, cut out in bold relief, all of them different from each other. The whole is excellently well composed, and highly interesting as a study. One of the varieties of Ionic capitals shown by Piranesi is that from a column in the Church of

• Santa Maria Transtevere at Rome, which is ornamented on its face with a small head or bust upon the face of the intervolute and abacus, and the eye of the volutes themselves is unusually large, and contains a small half-length female figure carved upon it,—which, though it can be distinctly seen in a drawing, can be hardly perceptible in the column itself. The only other variety of or *invention* for the Ionic capital that we can notice is one that has frequently been practised by Italian Architects, and which may be distinguished as the *festoon* or festooned capital, the volutes being turned diagonally, and a festoon being suspended from the eye of one volute to that of the other beneath each face. This not only gives variety and richness to the capital, but by increasing its volume or bulk increases its importance also, and produces great play of light and shade: there is harmony together with diversity in the combination of forms, the curve of the festoon being, though dissimilar, in agreement with the outline of the volutes. The columns of the circular portico to the Church in Langham Place have capitals of this description, in which cherub heads are introduced into the festoons; and so far as the mere capitals go, that specimen of Ionic is entitled to much praise: the misfortune is, that the Order is not satisfactory as a whole; for the increased richness of the capitals requires that there should be a corresponding degree of richness given to the entablature. At present there is no proportion—that is, with regard to decoration—observed; for the same entablature, or cornice at least, which is in keeping with a smaller and plainer capital, cannot be equally adapted to a larger and more ornate one, but partakes either of excess, or the ‘too much’ in the one case, or of deficiency, or the ‘too little’ in the other,—not perhaps as to size, but in regard to the *quantum* of embellishment. To obviate the meagreness and insignificance of the usual Italian Ionic capital, Sansovino and some others have frequently given it a necking, either plain or enriched, which, even when plain, greatly improves the general appearance of the column by increasing the depth of the

capital and reducing the height of the shaft. To make this the clearer, let us, without pretending at all to exactness, call the column nine diameters high, and the capital either half a diameter, or a whole one, accordingly as it is without or with a necking: now in the first case the capital will be to the shaft (base included) only as one to *seventeen*, whereas in the other it becomes as one to *right*; which is not at all too much: while the other way the shaft is much too lanky, and the capital too low,—as is probably felt by those who cannot explain the cause of such disagreement and disproportion.

ENTABLATURE.—There is not much to say, at least there is no occasion for saying much, relative to this part of the Roman and Modern Ionic Order. The ancient examples of it are by far too few to admit of any general laws for it being derived from them; nor are the examples themselves very satisfactory. That of the Ionic of the Theatre of Marcellus is, perhaps, the best upon the whole, and seems to have been that which has guided the Moderns in the composition of their entablature, although they have very greatly diminished the proportions of the cornice, which is there nearly equal to both architrave and frieze together. In the Athenian Ionic we may set down the architrave, frieze, and cornice as about 50, 50, and 35 minutes respectively, making altogether two diameters and 15 minutes (or a quarter of a diameter); therefore the cornice is to each of the other two divisions of the entablature only as 35 to 50. In the Roman Ionic, on the contrary, the cornice is by much the largest division: in the Fortuna Virilis example the measures are,—architrave 38', frieze 19', cornice 70'; in that of the Theatre of Marcellus, 43'—36'—66', making the entire entablature 127', or 2 diameters 7'. Although modern Architects vary from these proportions, and some of them make the frieze equal to, or more than the architrave, they all agree—in doctrine at least, if not in practice—in making the cornice the largest division of the entablature; and as the projection is usually equal to its height, or thereabouts, the cornice thus gains

in importance both ways, and, as far as its mere proportions are concerned, becomes an adequate finishing to the entire Order. This latter mode certainly appears more in accordance with artistic principle: shall we then presume to say that the Greeks were wrong in their treatment of the Ionic cornice?—Well, let us say then, that they were not quite so right as they might have been. To us, the Asiatic Ionic cornice (for instance that of the Priene Order) is far more satisfactory than either the Hellenic or Athenian; and in our opinion it would require a cornice richer still, to correspond with the highly elaborated Erechtheum capital, and maintain due artistic keeping in the whole of that Order. These remarks partake, perhaps, too much of digression: we will therefore dismiss them, and the cornice also, merely adding that either dentels, or larger plain blocks, placed rather wide apart from each other, are considered the proper characteristic marks of the Ionic cornice.

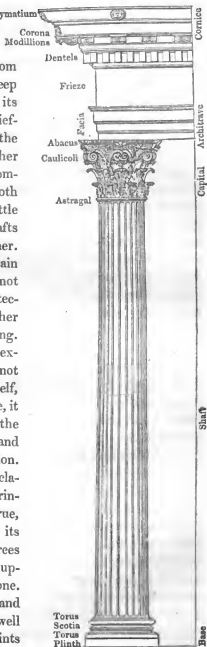
There is nothing in either the architrave or the frieze that calls for observation, except that the Moderns have frequently given to this Order, by way of distinction, a convex frieze, technically termed a *pulvinated* one from its fancied resemblance to a cushion (*pulvinar*), whose sides swell out by compression when sat upon. A frieze of the kind occurs in what is otherwise a very corrupt specimen of the Order, in the Baths of Diocletian. It would be absurd to suppose that such form of frieze originated in an imitation of the thing after which it is now named; and there are two motives, either of which, or both combined, may have led to it. The first of them is, that such curvature in the face of the frieze may have been thought very suitable for the Ionic Order, as agreeing with the curved forms predominating in the character of the capital,* namely, the volutes. The second is, that a convex surface produces greater diversity of light and shade than a plain one; and coming between the architrave and cornice, is sufficiently distinguished by contour alone. Still it must be admitted that such form is somewhat too arbitrary and fanciful to be

in accordance with strict architectural principles. It is well enough suited for interiors, or for entablatures upon a small scale, such as those of doors and windows, but not for a large external Order. The pulvinated frieze occurs frequently in the Cinque-cento and Renaissance styles, and in our own English Renaissance, or Elizabethan. An instance of it may be seen in that well-known and celebrated piece of architecture by Jones, the front of Whitehall Chapel, whose Ionic Order generally will convey an idea of the Italian mode of treating it. And it so happens that the tasteful little screen front of Dover House (added by Holland to the original mansion), on the opposite side of the street, offers an example of the Ilissus Ionic, whereby immediate comparison between the two styles may easily be made. Another specimen of Italian Ionic, and of Italian Doric, is the new portion lately added to the Carlton Club House, Pall Mall, which is all but a literal copy from Sansovino's Library of St. Mark at Venice. Sansovino seems there to have aimed at the greatest possible richness for both Orders; and in his building the Doric metopes are sculptured, but are left plain in the Club House, although such decoration for them would have been novelty here, and would have brought that lower Order more into keeping with the upper one. The shafts of the columns are not fluted as in the Italian building, but for very sufficient reason: being of dark polished granite, they would have acquired no greater richness in consequence of their being so cut; on the contrary, the effect of the material itself would have been impaired. The Ionic capitals have an ornamented necking, which is here not only a beauty but a great propriety, because without it the capitals would have looked diminutive, more especially beneath such a greatly exaggerated entablature. Tested by ordinary rules, this last must be pronounced monstrous, licentious in the extreme, perhaps downright barbarous; and, no doubt, would be so, were it not protected by the name of Sansovino. His English copyist has therefore sufficient authority for it,—not so, Sansovino himself: whence, then, did he get his *prece-*

dent? Well, he dispensed with precedent, and using the privilege of a master in his Art, ventured beyond its written rules and conventionalities,—ventured where he might have failed, and exposed himself to derision,—but succeeded, and has been crowned by applause. In Art, as in other things, success sanctifies enterprise: if you fail, the world calls you a madman or fool; if you succeed, it bows down to you as a genius. It must be confessed that such an entablature as Sansovino has there given his Ionic Order would be nothing less than monstrous, did the Order itself constitute the edifice, as in the antique temple; instead of which, the two Orders there introduced are no more than ornamental accessories, and the greatly enlarged entablature of the upper one is to be regarded as proportioned with reference not so much to its own columns as to the general mass of the entire façade. It may be as well to remark here, that both the Carlton Club House and Whitehall Chapel are instances of *super-columniation*, or two Orders placed one over the other—in the former building, an Ionic over a Doric—in the latter, a Corinthian over an Ionic Order. And in both cases the columns are *attached* or *engaged*, as is said of columns which are united to the face of a wall so as not to project from it as much as their diameter, but only about half or three-quarters of it, and they are therefore termed respectively *half* or *three-quarter* columns.

CORINTHIAN ORDER.

WE now arrive at the third and last of the Orders, or that which is distinguished from the other two, more by its deep and foliated capital than by its proportions,—at least it is chiefly so distinguished from the Ionic, with which it has in other respects many points in common; for the columns of both have bases differing but little from each other, and their shafts are fluted in the same manner. How this Order came to obtain the name of Corinthian is not very clear; nor is it, architecturally, of any moment whether such name be right or wrong. All that is certain is, that examples of this Order have not been found at Corinth itself, where, judging from its name, it would seem to have been the prevalent style of building, and there brought to perfection. There is a pretty legend relative to the origin of the Corinthian capital, which, if not true, has at least probability in its favour, and is many degrees less nonsensical than the supposed origin of the Ionic one. Nay, it is even valuable and instructive, as showing how well a skilful artist can derive hints



from trivial or accidental circumstances, and by improving upon them, turn them to account. As the story goes, the sculptor Callicrates was so struck by the graceful forms into which the leaves of an acanthus-plant had grown up around a tall basket covered by a square slab, that he sketched it, and conceived the idea of fashioning the capital of a column after it. It must be owned that the anecdote seems itself to be an invention intended to account poetically for the origin of such form of capital, and perhaps on no better grounds than that of a fancied general resemblance,—just as some dreamers have detected the origin of the Gothic style in an avenue of lofty over-arching trees, or in the interlacing stems of a framing of wicker-work. Unluckily for the credit of so respectable a legend, the earliest examples exhibit, instead of the strongest and most direct resemblance to the presumed prototype, the faintest and most vague of all. The Corinthian capital seems rather to have developed itself gradually out of the Doric one ; first, by its necking being deepened and ornamented with a row of leaves, and then afterwards the echinus suppressed, and the whole body of the capital made to expand in a concave curve up to the abacus, with a second row of plain and flatter leaves above the first one. At least the capitals to the small columns of the porches of the Tower of the Winds at Athens, and others discovered at Miletus and elsewhere, seem to favour such hypothesis ; and in further evidence of such Doric derivation is the circumstance of the columns of the Tower of the Winds being without bases. It will be argued, perhaps, that such examples do not at all answer to the character afterwards established and adhered to for capitals belonging to that Order. Very true : but then they may surely be received as incipient efforts and attempts towards the formation of a third class of capitals ; and in the instances just referred to, the overhanging square abacus without any foliage or curling tendrils spreading out to support its extremities, points, in our opinion, clearly enough to a derivation from the Doric capital, considerably enlarged downwards, and also greatly enriched. However, we

leave others either to adopt or reject this notion, just as they may be disposed. At the best, all such questions are little better than matters of idle curiosity, and must always remain questions after all.

To quit conjecture for fact, the fact is the Corinthian Order does not appear to have been ever matured into a distinct style and complete system by the Greeks. There is, indeed, one solitary Athenian example of Corinthian, which exhibits the utmost refinement of exquisite richness attempred by exquisite delicacy. In the Lysicrates capital,—as we will for convenience call it (the example alluded to being that of the monument of Lysicrates, otherwise called the Lantern of Demosthenes, at Athens),—foliation may be said to have attained its culminating point: rivalled it may be, but hardly surpassed. Still it must be confessed, as a whole, that Order leaves much to be desired for it, there being nothing of corresponding beauty and luxuriance in the rest of it. The cornice, for instance, is only a simple dentelled Ionic one, nor are any of the mouldings of the entablature cut. There was, however, in that particular case, above the entablature, what fully counterbalances and carries out the idea and expression of the capitals, namely, the ornamental roofing, and the matchless finial which crowns the structure, and produces a full climax of beauty and of grace. Charming as the original itself is, or, more correctly speaking, *was*, it has perhaps been more blunderingly copied and imitated than almost any other antique structure. Although the whole—its lofty-proportioned basement included—is not above 36 feet high, a copy of it, or what calls itself such, has sometimes been hoisted up on the top of a lofty tower, or raised on a modern church or chapel to serve as its belfry; or else the columns and entablature have been taken just verbatim, and applied, by way of change, as an Order, upon a scale for which the capitals, at least, were never intended. The Strand front or entrance of Exeter Hall consists of a loggia with two lofty columns of the kind, whose capitals, being placed at such a height, show as no better than heavy

sculptured masses whose details it is impossible, or at least requires great patience, to make out. More preposterously still, the Girard College at Philadelphia plumes itself upon exhibiting an exact copy of this Order, where the columns are magnified to the height of between fifty and sixty feet, so that all that can be made out of the capital is, that it is exceedingly rich,—by very far too much so for any other part or feature in the building;—and that is called being classical!

Let us now consider the Corinthian Order in its general and prominent characteristics, belonging to all varieties of it alike. Although the Order itself is the most delicate and lightest of the three, the capital is the largest, being considerably more than a diameter in height,—upon the average, about a diameter and a quarter. This, however, will cause the reader no surprise, if he bears in mind what has been before said as to the proportion to be observed between the column and its capital. The taller the former is, the taller must be the latter also, and so far bulkier; although, while actually increasing its bulk, its tallness corrects the appearance of heaviness by giving the *proportion* of slenderness. A capital whose height is only half a diameter is, of course, by no means positively so bulky as one which is upwards of an entire diameter in height, but then it is much bulkier or broader in its proportions, being about twice as broad as it is high,—whereas the other is much higher than it is wide. This explanation makes, we hope, the matter sufficiently clear, and that after it the reader will not feel himself at all puzzled about it.

The capital has two rows of leaves, eight in each row, so disposed that of the taller ones composing the upper row, one comes in the middle, beneath each face of the abacus, and the lower leaves *alternate* with the upper ones, coming between the stems of the latter; so that in the first or lower tier of leaves there is in the middle of each face a space between two leaves occupied by the stem of the central leaf above them. Over these two rows is a third series of four leaves, turned so

as to support the small volutes which, in turn, support the angles of the abacus. Besides these outer volutes, which are invariably turned diagonally, as in the four-faced Ionic capital, there are two other smaller ones, termed *caulicoli*, which meet each other beneath a flower on the face of the abacus. The abacus itself is differently shaped from what it is in either of the other two Orders. In the Doric it is, as we have seen, merely a thick square slab, fitting the echinus beneath it, and left perfectly plain. In the Ionic it is square, but its sides are moulded, whether they are carved or not. The Corinthian abacus, on the contrary, is not, properly speaking, a square, although it may be said to be so in its general form, inasmuch as it possesses *squareness*, having four equal sides. But instead of being straight, the sides of the abacus are concave in plan, being curved outwards so as to produce a sharp point at each corner, which is usually cut off. Thus we find that the abacus here assumes a very different shape from its original one; yet merely to know this is to know very little. Such form of it is of course a distinction, but it was not for the sake of distinction that it was adopted. It grew out of intention and purpose: it was dictated by necessity—by artistic necessity at least, which requires that the abacus should be adjusted to and conform to the upper part of the capital, so that they fit each other. Now a square abacus would not at all suit a capital whose foliage spreads out so widely at its angles. We have spoken of the capitals of the Tower of the Winds, as, according to our opinion, showing the earliest formation of what we now call the Corinthian capital. In that example the abacus is square, and the upper row of leaves of the kind called *water-leaves*, from their resemblance to those of water-plants, being broad and flat, and merely carved upon the *vase* or body of the capital. The next stage of progress or transition was to add larger curling leaves and volutes to support the angles of the abacus; but then if the abacus remained square as before, it would either overhang the capital too much in the centre of each face of it, or would not cover

the enlarged sweep of the leaves and volutes at the angles. Consequently, it was necessary to effect both extension and reduction for the abacus,—extension at its angles, and reduction as regards its general bulk, which beforehand apparently very difficult, if not impossible feat, was accomplished in the simplest manner possible, by merely curving the sides of the abacus. Thus not only is the abacus expressly shaped in conformity with the great projection of the leaves, &c. at the four angles of the capital,* but a beautiful contrast, contributing to general harmony, ensues in consequence,—the concave sides of the abacus corresponding antithetically—in other words, contrasting with the general convexity of the capital.

The general structure and configuration of the Corinthian capital are now described, and, it is to be hoped, understood also. It may be as well, however, just to recapitulate: the body of the capital is surrounded by two rows of leaves, eight in each row; besides which there are four leaves which, with the volutes over them, serve to support the four angles of the abacus, which is fashioned as we have just been explaining. Simple and limited as these elementary and *constitutional* forms may be thought to be,—insufficient for any great variety or range of character, the Corinthian capital admits of almost infinite modification. Putting entirely aside all details and their minutiae, the capital of this Order is susceptible of very great diversity of character in regard to its general proportions alone, as may be seen by a comparison of a few—and they but a *very few*—examples given in a note below.†

* For similar reason, the same concavity in the sides of the abacus takes place in the four-faced Ionic capital, the abacus being so shaped in order that it may subtend over and cover the diagonally turned volutes.

† We place these examples according to their respective proportional heights, beginning with the highest, and descending to the lowest, and note their measurements in *minutes* rather than in diameters and fractional parts, as being the most direct and convenient mode of comparison. The

Almost every antique example is marked by something peculiar to itself; wherefore, properly to analyze them and compare them all, would require not only some scores, but some hundreds of drawings, and hundreds might be multiplied into thousands, were we to collect together all the varieties of the descendants of the Corinthian or foliated-capital column that are to be found in buildings of the so-called Byzantine style, when the original idea of an Order had been entirely lost sight of. In fact, all the compositions that have been produced with the intention of producing a *new*, and what as such ought to be a perfectly distinct Order, congruent in all its parts, have consisted of little more than variations of the Corinthian capital; as if difference in the details of the capital sufficed to constitute a different and quite distinct Order. Properly understood, *Order* is, if not exactly so, little more than another word for style; and a new style is not to be invented or established, like the alteration from old to new style of the almanac by Act of Parliament. Style must of necessity grow up gradually: the ideas of many minds must contribute to its formation.

From the examples whose proportions are stated in the preceding note, it will be seen that the height of the capital varies from 60', or just a diameter, to 87', or nearly half as much again; although it must be allowed that the latter is a very unusual degree of height, nor does that example (the Lysicrates one) belong, like the others, to the Roman Corinthian class. Reserving our remarks on one or two particular

height of the capital is taken exclusive of the astragal which divides it from the shaft of the column; and as the *expansion* of the capital upwards has also to be considered, the extreme width of the abacus is also indicated.

	Height of capital.	Diameter of abacus.
Lysicrates example	87'	94'
Nerva do. (columns of the Forum of Nerva)	73'	90'
Pantheon at Rome	69'	90'
Jupiter Stator, Temple of,	66'	97'
Tivoli, Temple of the Sibyls, . . .	60'	81'

specimens of the latter till after we have spoken generally of the other parts of the Order, we continue by saying that the proper Corinthian base differs from that of the usual Ionic or Attic in having two smaller scotiæ, separated by two astragals : however, both kinds are employed indiscriminately, and the Attic base is that which is generally used, except a greater degree of delicacy and richness than ordinary be required. As the shaft is fluted similarly to that of the Ionic column, viz. with twenty-four channels, there is nothing for notice or remark there, unless it be that the flutes are sometimes *cabled*, as it is called, that is, the channels are hollowed out for only about two-thirds of the upper part of the shaft, and the remainder cut so that each channel has the appearance of being partly filled up by a round staff or piece of rope, whence the term *cabling*. Though not approved by puritan critics,—who, nevertheless, wink at, or else are blind to much greater licenses,—this mode of fluting certainly gives an expression of greater strength to the lower part of the column, and, by contrast, that of greater delicacy to the upper one. Several other modes of fluting, or otherwise decorating the shafts of columns, were occasionally practised by the Romans, as may be seen from architectural specimens and fragments still extant, and which have been delineated by Piranesi and others. Some of them are so exceedingly elaborate in execution, as to be, if for that reason alone, quite unsuitable for practice unless on very peculiar and exceptional occasions. Still, artistic ideas are to be obtained from them. Modern Architects, however, even those who have been most ambitious of decoration—most extravagant and capricious in other respects, have been remarkably abstinent and sober with respect to their treatment of the shafts of their columns, they having left them for the most part quite plain, even where a more than ordinary degree of enrichment has been aimed at by them in other parts of the design. The shaft of a column is, indeed, complete without fluting, unless, perhaps, it be that of the Greek Doric, in which such striating of its surface appears almost essential to character,

and requisite for counteracting what would else look like both heaviness and baldness. Consequently, Fluting is what admits of being either applied or omitted *at discretion*; in other words, accordingly as sound artistic feeling would dictate. Such feeling has in one instance been exhibited in an equally successful and peculiar manner, both fluted and unfluted columns being there (*viz.* the loggia at the north-west angle of the Bank of England) combined in the same composition; whereas had the inner ones been fluted like the others, not only would picturesque contrast have been forfeited, but a look of disagreeable confusedness would have taken place. Such kind of contrast is analogous to that of the fluted columns and plain antæ of the Greek Doric. In connection with this last observation, it may be here noted that the Corinthian mode of fluting is applicable to pilasters and other plane surfaces, as well as to the shafts of columns. It serves to impart richness, and what is understood by the term '*colour*,' to them. When antæ—as to deserve such term, they ought to do—occur only at extremities of walls, at right angles to the front, they of course show themselves sufficiently distinctly; but with pilasters slightly projected upon the face of a wall it is quite different, because in such case the face of the pilaster does not show itself decidedly unless the wall is '*rusticated*,' or else the pilaster itself of a different colour and material; and hardly is it necessary to say that when the shafts of columns and pilasters are of variegated marble or otherwise distinguished by colour, fluting is quite out of the question, since instead of enhancing effect, it would then rather impair that of the material itself, whose intrinsic value and beauty render further embellishment superfluous, if not injurious also.

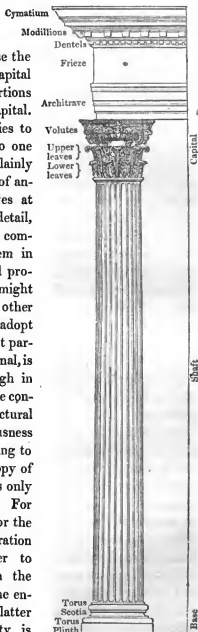
ENTABLATURE.—The architrave is generally divided into three *faciæ*, (the lower one much narrower than the others, which is rather contrary to architectonic principle, the weaker member being placed under heavier ones,) with mouldings between them, which, though frequently left plain, are properly enriched in the best and most consistently finished-up ex-

amples. We pass over the frieze, that being merely a single surface, either plain or sculptured. The cornice is very much larger than in the other Orders,—larger as to height, and consequently as to projection also; which increased height and projection, and we may add, increased richness, are demanded by the greatly enlarged bulk of the capital and its more elaborate decoration. Examples vary so greatly that we can give only approximating mean and average proportions, which may be set down at about 2 diam. 12' for the whole entablature, and 54', or something less than a diameter, for the cornice; but it is in many instances more, in others as much less. As may be supposed from this greatly increased depth of the cornice, it consists of a greater number of mouldings beneath the corona, for that and the cymatium over it invariably retain their places as the crowning members of the whole series of mouldings. To the dentels of the Ionic cornice is added a row of *modillions*, immediately beneath and supporting the corona. These modillions are ornamental blocks, curved in their under-surface somewhat after the manner of the letter S turned thus ∞ ; and between them and the dentels, and also below the latter, are other mouldings, sometimes cut, at others left plain. Sometimes a plain uncut *dentel band* is substituted for dentels; sometimes, in simpler cornices, that is omitted altogether, and plainer blocks are employed instead of modillions; or else both dentels and modillions are omitted, as in the Temple of Antoninus and Faustina, notwithstanding that its cornice is considerably enriched, even the face of the corona being fluted.

Besides the several varieties of the Corinthian shown in entire compositions of the Order, or the columns and entablature together, there are numerous fragmentary examples existing, either in single columns or capitals alone, or in cornices and other parts of entablatures; some of which display such prodigality of decoration and such difference of character from the usual Corinthian, that they might very well pass for belonging to a distinct Order, if that variety which is classed

as a separate one, under the name of COMPOSITE, can with any propriety be reckoned such, merely because the volutes at the angles of the capital are expanded into the proportions of those in the Roman Ionic capital.

The very dissimilar varieties to be met with, all belonging to one and the same Order, show plainly enough that the Architects of antiquity considered themselves at liberty to design their own detail, and to treat an Order as a composition marked out for them in its leading forms and general proportions, but which they might fashion nearly *ad libitum* in other respects. Modern Architects adopt a contrary course, which, if not particularly artistic, or even rational, is certainly convenient; although in spite of all precaution to secure conformity and maintain architectural orthodoxy, grievous licentiousness will creep in. It is something to get what is only a faithful copy of an ancient example, but it is only very rarely we get even that. For instance, fluting is omitted for the columns where such decoration may be required, in order to make them correspond with the degree of richness given to the entablature; or else it is the latter with which wholesale liberty is

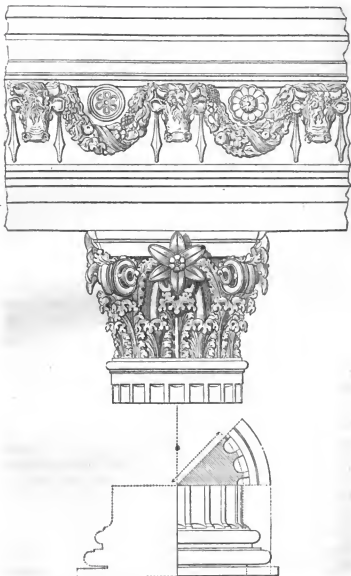


taken,—mouldings which in the cornice of the original are more or less enriched, being left plain, or a bare frieze substituted for a sculptured one, and other little liberties of that kind, which are considered perfectly allowable, and to make hardly any real difference, although they in fact alter the character of the whole composition. Either the original is itself faulty, or it must suffer by *piecemeal* alteration. It will, perhaps, bear to be somewhat reduced in richness, or, *vice versa*, to have a greater degree of decoration given it; but in whichever way such kind of alteration takes place, it should be conducted uniformly for the whole composition. No excellence of proportions can atone for *disproportion* in regard to consistency of embellishment, and for the general disharmony of the whole composition. Italian Architects not unfrequently either overload their compositions with ornament, or leave them quite bare, and make no scruple of putting a cornice of the most meagre description, without either dentels or mouldings, to an Order whose capitals denote it to be intended for Ionic Corinthian.

It was, perhaps, fortunate both for Sir John Soane, and that example of the Corinthian which he employed for the Bank of England, that it was not an invention of his own, or it would, in all probability, have been ridiculed as a monstrosity; and he would have been thought to have there out-Soaned himself in whimsicality and capriciousness. As it happens to be, however, an express copy from the circular Temple at Tivoli, people are at liberty to admire it, more especially as the mere application of it for the first time in this country—the only one where it has been adopted—does not exalt Soane into the successful inventor of a ‘new Order.’ In the system of the Orders it may certainly be regarded as a newly-discovered planet, being so distinct from every other example of the foliated-capital class; distinct not only in the capital itself, but in all its members, in all its proportions, in the style of all its details, and, consequently, in its character. The height of the column is only 9.25 diameters; the capital, measured from above the astragal,

only 1 diameter, and the entablature only 1.42' diameter. These proportions give the whole Order a certain expression of masculine simplicity, more especially as the column is hardly diminished at all, the difference between the upper and lower diameter amounting to no more than 4', or only $\frac{1}{12}$ th of the larger diameter, that being of course 60', and the other 56'. The base consists of two *tori*, but instead of the usual scotiæ between, there is merely a narrow plain fillet, and a second broader one, overhung by the upper torus. Besides which, another peculiarity is, that the lower torus is somewhat detached from the surface on which the column stands, by a very narrow but deep incision beneath it,—a mode of treatment quite different from the usual one of placing the base upon a square plinth, but which, different as it is, does not produce, as might be supposed, any appearance of weakness, the incision being no more than a mere line—a delicate artistic touch. The fluting (at least the mode in which the flutes are terminated) is not a little remarkable; for below, they and the fillets are continued to and die into the upper edge of the base; while above, they are terminated horizontally instead of by a semicircular curve, as in all other examples of both Ionic and Corinthian fluting. The capital is so exceedingly peculiar in conformation and detail as to defy verbal description. The leaves have nothing in common with those of the usual acanthus; the volutes are of peculiar shape, and the flower which ornaments the abacus is as singularly large, and descends to the top of the upper leaf: boldness and breadth of parts characterize the whole composition, and also that of the entablature. As all its mouldings are uncut, this last would be much too plain to be in keeping with the column, were not the frieze sculptured with rich and 'bossy' festoons in the same energetic style as the capitals. Such ornamentation of the frieze is absolutely part and parcel of the Order; and the value of it will be best understood by comparing those parts of the Bank, in which it is retained, with others in which it is omitted. The same Order, with the frieze enriched, has also been since em-

ployed in the front of St. Paul's School, St. Paul's Church-



yard; but there, owing to windows and other disturbing cir-

cumstances, its effect is greatly impaired, as is the case even in the centre of the south front of the Bank itself, where it differs widely from that of the beautiful loggia at the north-west angle of that edifice, and compared with which it manifests in the part first mentioned a sad falling off, becoming no better than a dull, spiritless, prosaic version of its real self. In a word, it is out of its element.

The next, and it must be the last example which can here be noticed, is that of the so-called 'Jupiter Stator,' which may be said to exhibit *Corinthianism* in its fullest luxuriance. Great as is the dissimilarity between this and the preceding example of the Order, they are alike in one respect, each being perfect in its way, complete, and harmonious in all its parts; and we ought to be thankful that two such opposite specimens of one and the same—namely, the foliated-capital style—have been preserved to us for our admiration, and for our instruction also, as if on purpose to convince us what opposite kinds of beauty may be arrived at where, though the general configuration of the Order is adhered to, a different spirit and character are infused into it. Of the example now referred to, the character is elaborate richness subdued by refined taste. Though of lower proportions than usual, the capital is singularly ornate, and a corresponding degree of ornateness is diffused over the entire Order. The second or middle fascia of the architrave, and all the members of the cornice, except the dentels and the cymatium over the corona, are sculptured, and the whole is consistently finished up in every part. The first application among us of this superb example of the Corinthian was in Holland's beautiful portico to Carlton House, where, instead of being moderated, its richness was even augmented, the bases of the columns being carved, and the frieze sculptured. That portico has disappeared: the columns, indeed, still remain, having been used for the portico of the National Gallery, but the Order itself exists no more—at least not there. Another copy of it we now have in the Treasury Buildings, Whitehall, where it was

applied by Soane, but with no great judgment or taste, his building being quite at variance with the Order he selected for it, the former being any thing but Corinthian in character. Perhaps he selected it, as we have done, for the purpose of exhibiting in two of his works such very distinct styles of Corinthian as are the Tivoli and the Jupiter Stator examples. As now altered by Mr. Barry, the Treasury Buildings have received a great accession of richness, and the frieze, which was before plain, is now ornamented. But the Order itself is not improved, at least does not show itself to the same advantage as before, by being raised so much higher above the eye than it was at first; it looks comparatively diminished, and the beauty of its details is lost. We have, indeed, the Order; and nothing is wanting but that impressiveness and effect which gave such charm to the portico of Carlton House.

As to that variety of the Corinthian which passes under the name of *Composite*, the reader may now, after what has been said and shown, be left to judge whether it can with any propriety be classed as a distinct Order, instead of being reckoned merely as a variety of the other, and by no means the most striking variety of that foliated-capital class. The difference between the two extends to no more than a part of the detail of the capital, the general normal character of Corinthianism of which is no way affected. And if the Ionic Order be allowed to comprehend many decidedly marked varieties of the voluted-capital type, there surely can be no necessity for splitting Doric and Corinthian, and getting out of them the Tuscan and Composite Orders. It will, perhaps, be fancied by some that by thus reducing the number of the Orders to three, we in some degree limit the resources which the Architect derives from them. The fact, however, is precisely the reverse; for although we limit them in number and with respect to names, we set no limits to their respective powers. A hundred different examples, each marked by individual character, or peculiarity of treatment, may yet all belong to the same generic type or order; and three Orders endued with

plastic energy, elasticity, and productive power, are far better than five, or even fifty formal, frigid, and feeble stereotyped, ready-made samples of columns to which we should be bound to confine ourselves. Ancient examples are not to be considered merely as *patterns*, to be copied mechanically, but received as studies for the Architect's guidance and instruction, which inform him what has been done, but allow him, should he possess sufficient inventive talent, to produce other compositions.

COLUMNATION.

Columns and entablatures in themselves do not, properly speaking, constitute an Order, although they serve as specimens of it. They must enter into and regulate the organization of a structure before they can become by composition what is, strictly speaking, an Order. As exhibited in their temples, the system of columniation practised by the Ancients was strictly organic and natural. Instead of being something accessory, supplementary to, and independent of the fabric, that might be either omitted or applied at pleasure, as commonly practised in Italian and modern composition, the Order itself constituted the exterior of the building, at least of that side or front of it where it was introduced, when it was not continued throughout; so that the Order and its dimensions once established, and the mode of intercolumniation determined, the edifice shaped itself. Before we enter upon the subject of intercolumniation, it will be desirable to explain the various forms of temples, and the technical terms by which they are distinguished.

The *naos*, or *cella*, as it is more usually called, or temple itself, was comparatively small, even where the entire mass was of considerable size, gradual extension of plan being produced not so much by any great enlargement of the interior as by external columniation and its gradual development. It is probable that the earliest Greek temples consisted of the *naos* only, and were accordingly plain ASTYLAR buildings, or without columns, except in front or at the

entrance end, where an enclosed porch was formed by continuing the side walls, and placing columns between them *in antis*, that is, between the two *antæ* or pilasters forming the ends of those walls. The next step seems to have been to advance the porch before the main building, instead of keeping it recessed within the side walls, thereby converting it from a portico *in antis*, into a *prostyle*, or projecting line of columns: thus a *distyle in antis*, or a portico consisting of two columns between *antæ*, consequently of three *intercolumns*, or open spaces between the *antæ* and columns, would become a *tetrastyle*, or projecting portico of four columns and three *intercolumns*. By the other end of the building being similarly treated, the temple became *amphiprostyle*, or *prostyle* at both ends, in rear as well as in front, the sides still remaining *astylar*. The next and last style of advancement was to continue columniation all round, enclosing the *cella* within colonnades along its sides as well as at its ends, which disposition of plan is expressed by the terms *peristyle*, or *peristylar*, and *peripteral*, which of necessity produces two columns and two *intercolumns* more in front; for what would otherwise be merely a *tetrastyle prostyle*, with four columns and three *intercolumns* (the number of the latter being always one less than that of the others), becomes by the colonnades being continued along the side, a *hexastyle* (six columns and five *intercolumns*); or if originally a *prostyle hexastyle*, it would be rendered an *octastyle* (eight columns and seven *intercolumns*), and so on.* It should be observed, too, that a building cannot at the same time be *peristylar* and have a *prostyle* portico, the latter being merged in the general columniation, instead of projecting from the rest of the edifice as a distinct feature. Of *peristylar* temples there were two sorts, viz. those with a single row of columns on each side, and those which have two, which last are distinguished by the term *dipteral*, i. e. having two wings or *aisles* on each side. Although it did not at all affect the

* By way of illustrating these terms more directly by instances taken from well-known modern porticoes which answer to the respective deno-

general external appearance, notwithstanding that it extended the plan by adding two more columns and intercolumns to the front, this last-mentioned mode was attended with greater richness of columniation, and the inner columns contributed not a little to variety of effect and play of perspective; besides which, greater sheltered space was gained for ambulatories; whereas in the usual simple peristyle, where the space between the outer columns and the walls of the cella was limited to the width of a single intercolumn, the side colonnades were mere narrow passages, very little wider—at least in Doric temples—than the diameter of the columns themselves, consequently of very little actual service. In what is called the *pseudo-dipteral* mode, more of clear space within the colonnades was provided by omitting the inner columns, which mode reduced the plan to that of a simple peristyle, the only

minations and distinctions above noted, we here give a classified list of some of them:

Distyle in antis.	{ Two columns & two antæ.	Three inter- columns.	St. Paul's, Covent Garden.
Tetrastyle.	Four columns.		{ Hanover Chapel, Regent Street. } *Covent Garden Theatre.
Hexastyle.	Six columns.	{ Five inter- columns.	{ St. George's Church, Bloomsbury. *St. George's, Hanover Square. St. Martin's Church. *St. Pancras' Church. India House. Post Office. *College of Surgeons. *College of Physicians. *Colosseum.
Octastyle.	Eight columns.	{ Seven inter- columns.	{ National Gallery. Royal Exchange. British Museum.
Decastyle.	Ten columns.	{ Nine inter- columns.	{ London University College.

The porticoes marked with the * are simple prostyles, or *monoprostyle*, advancing only a single intercolumn forwarder than the rest of the building; while the others are *diprostyle*, or show two open intercolumns on their flanks; except Hanover Chapel, whose portico is partly prostyle and partly recessed, and that of the India House, which is entirely recessed, although its elevation is not a composition *in antis*; had it been such, it would have been a *tetrastyle in antis*, that and a hexastyle having the same number of intercolumns, viz. five.

difference being, that instead of the width of a single intercolumn, a clear space, equal to two intercolumns and one column, was gained for the ambulatories. The Temple of Jupiter at Selinus was of this description, and being only octastyle in front,—the least possible width for a dipteral or pseudo-dipteral plan,—of the seven front intercolumns, four (*i. e.* two on each side) were given to the lateral colonnades, and only three left for the breadth of the *cella*, which must have looked like a smaller edifice standing within a colonnaded and covered enclosure.

The above few and simple arrangements of plan are nearly all the varieties that the Greek temple style offers; and some of them are little better than distinctions without differences, inasmuch as the differences do not affect general external appearance. Peripteral, dipteral, and pseudo-dipteral, all agree in the main point, and the two latter answer to the name of peripteral as well as the first, being merely modifications of it. Great as were its æsthetic beauties, Greek Architecture was—why should we scruple to confess it?—exceedingly limited in its compass and power of expression: what it did, it did admirably, but it confined itself too much to one idea. “When you have seen one green field,” says Johnson, “you have seen all green fields;” and so we may say of Greek temples,—when you have seen one or two of them, you have seen all of them. However they may differ from one another as to the treatment of the Order adopted for them, the number of their columns, and mere particulars of that kind, they resemble each other very nearly in all leading points. Not only were their plans invariably parallelograms, but alike also as to proportion, forming a double square, or being about twice as much in length as in breadth; for so exceedingly *methodical* was the Greek system, that the number of columns on the flanks or sides of a peripteral temple was regulated and determined by the number of those in front. The number of the columns in front was invariably an even one, as otherwise there would be no middle intercolumn; but on the flanks of the edifice,

height, that is, height as measured by either breadth or length. Paradoxical as this may sound at first, nothing can be more clear when once explained. Discarding nicety of measurement, we will call a *tetrastyle* portico about a square in height, that is, about as high as wide; but add four more columns, extend it from a *tetrastyle* to an *octastyle*, so that it becomes about a double square in breadth, or twice as wide again, and the inevitable consequence is, that it is then only half as high as wide; that is, as to proportion, only half as *lofty* as it was before. The expression of *loftiness*, in which altitude greatly predominates over breadth, was quite beyond the reach of the Greek system. Their temples might be planted on lofty eminences, but the structures themselves never towered upwards. As far as it went, their *system* was perfect,—so complete indeed in itself as to be unfit for almost any other purposes than that for which it was expressly framed.

If the Romans corrupted the Greek Orders, the Doric and Ionic, they developed and matured the Corinthian Order, and also worked out a freer and more complex and comprehensive system of Architecture. To say nothing of their introduction and application of those important elements of both construction and design, the arch and vault—which hardly belong to a mere treatise on the Orders—it is to the Romans that we are indebted for varieties and combinations of plan that will be sought for in vain among Grecian structures.

Of the Romans it may be said, "*Mutant quadrata rotundis*,"—circular forms and curves displaying themselves not only in elevation and section, but in plan; and while, among the Greeks, Architecture was confined almost exclusively to external appearance and effect, in the hands of the Romans it was made to minister to internal display of the most enchantingly picturesque kind, as would be amply attested by the Pantheon alone. In that edifice, and Hadrian's Mausoleum (now barbarized into the Castello di S. Angelo), the cylindrical form was exhibited upon an imposing scale; in the Temple at Tivoli, in far lesser dimensions, but with most captivating taste;

and again in the Tomb of Cæcilia Metella, we have a fine example of an unbroken *astylar* circular mass. In such structures as the Colosseum and other Roman Amphitheatres, a different form of curvature, namely, the ellipsis, was employed with admirable propriety and effect. In interiors, again, we find the hemicycle or concave semicircular form both frequently and variously applied by the Romans in such edifices as their Baths, which afford many excellent studies for combinations of *plan*.*

To enter into the system of Roman Architecture as the subject itself would require, would very far exceed our present purpose and limits; much less can we pretend to treat here of the still more varied and complex Italian or Modern-European system, into which *fenestration* so largely enters, *columniation* being, more frequently than not, subordinate. Were we to touch upon the last-mentioned style and its various elements, it could be only so superficially as to be more disappointing than instructive. Better that the reader should admire our forbearance than complain of our unsatisfactory jejuneness. We may, however, permit ourselves to throw out one or two general remarks; the first of which is, that it is a great error to confound with the Italian the two Ancient Classical styles, applying to them alike the epithet 'Grecian,' merely in contradistinction to Gothic or Mediæval Architecture. It is absurd, too, to pretend to test by the Greek style, one so totally differently constituted as the Italian; an error that could hardly have been fallen into but for the practice of applying the same names to very different things. The term

* That it is possible, however, to miss the beauty of rotundity or convert it into deformity, and further, to make ugliness still uglier by means of so-called embellishment, is proved far more convincingly than satisfactorily by the interior of the new Coal Exchange, of which the citizens are nevertheless, it seems, not a little proud, and by which, if we are to believe the puffs of the penny-a-liners, foreigners are not a little struck, as indeed well they may be, with that equivocal sort of admiration which in plain English goes by the name of *astonishment*.

'Order' has quite a different meaning, as applied to the original classical mode of the Art, from what it has in the other. In Italian composition, an Order is more frequently than not, mere decoration in the shape of columns and entablatures, fashioned *secundum artem* (a very different thing from *artistically*), so as to resemble in detail and certain conventional distinctions those of the Ancients. Infinitely better would it have been, if, instead of allowing themselves to be misled by the pedantry of Vitruvius, the Architects of the so-called Revival, who showed much happiness of invention in other respects, had treated the Orders freely; or perhaps still better, had they worked out ideas of their own for columns and entablatures, whenever they had occasion for them either as matters of necessity, or as mere decoration. Had the Italians allowed themselves greater latitude in that respect, they would, in all probability, have been far less licentious upon the whole than they frequently were, and their buildings would have been more homogenous—more of a piece. But they must, forsooth, be Doric, Ionic, or Corinthian, oftentimes all the three at once, and a very great deal else into the bargain. Therefore the affecting to retain the ancient Orders in their purity served no other purpose than that of making all the more evident how completely their first intention and character had been lost sight of. However well intended, most unfortunate and mischievous in its results was the course taken by Palladio and other cinque-centists, of establishing an express model pattern of their own for each of the Orders. Such truly Procrustean mode of securing orthodox conformity was better suited for, and more calculated to produce, automats than artists; and it is one that inflicted upon Architecture an incalculable amount of dulness, with regard to the treatment of the Orders themselves, and of utter licentiousness in every other respect.

The clinging with scrupulous punctilio to what had become dead-letter forms after the system which had produced them had been abandoned and exchanged for another and widely

different one, was merely superstition and pedantry. It might show acquaintance with traditional learning and the writings of Vitruvius; but it also showed dulness of æsthetic feeling, or, what is not much better, deficiency of æsthetic power. There was, however, one mode of applying columns, which, although generally regarded as the most licentious and unorthodox,—nay, even preposterous, because quite contrary to all classical practice and precedent,—has at least one propriety, that of being rational, since columns there officiate as columns—as real supports; whereas in a great deal of Modern Architecture that is admired for the correct taste it displays, columns and their entablatures are mere expletives, instead of actual component parts of the fabric, and simulate a mode of construction neither required for nor practised in the fabric itself. The particular mode here alluded to is that in which arches are not only introduced together with columns, but the arches and columns are so indissolubly married together that they cannot be divorced, inasmuch as the arches are supported by the columns themselves, the former springing immediately from the capitals of the latter.* Such combination, it might be supposed, would be gladly admitted as sufficiently legitimate, both because in accordance with rational architectonic principles, and because it greatly extends the resources of the Art; nevertheless, such is the omnipotence of prejudice, that instead of being welcomed and adopted by us, it has been decried as a barbarism. As an irresistible and crushing argument against it, we are told that columns were not *originally* intended to be so applied;—ad-

* This mode of uniting together columns and arches is perfectly legitimate, whereas that in which a fragment of the usual entablature is left sticking or added to each column, (as, for instance, in the interior of St. Martin's Church,) is decidedly solecistical, since it is injuriously reminiscent of *epistylar* construction or *trabeation*,—is in itself unmeaning, and causes the columns to appear to have been too short, and therefore to have been eked out in height by blocks upon them, fashioned to resemble so many detached bits of an entablature.

mirable logic, truly! There are a great many other things besides columns which have in course of time come to be applied to uses not originally contemplated. In regard to that combination of columns and arches according to which the latter spring immediately from the others, and are supported by them, there are two questions: the first and practical one is, Do the columns afford sufficient support?—the second and æsthetic one is, Is there also appearance of sufficient support; or, is there any thing contradictory to principle, to judgment, and good taste? The first question needs no answer, since it answers itself, it being an indisputable fact that columns so employed do answer the purpose to which they are turned. The other question is not so easily answered: the prejudiced will of course answer it according to their own contracted taste and narrow notions, condemning the mode alluded to, without any inquiry into its merits and advantages, merely on the ground of its being quite at variance with the classical system of *trabeated* columniation, that is, with columns supporting a horizontal architrave and entablature, or general horizontal *trabeation*. That by the substitution of arches for architraves, the character of the Greek system is forfeited, cannot be denied; but then another character is established, whose difference from the original one ought not to be made its condemnation. To demand of a different mode that it should resemble and conform to the laws of that from which it differs, is absurdity in the extreme, for it is requiring that it should be at once a different one and the same. To compare different styles is a very useful sort of study; but to make any one style the criterion or standard by which others are to be judged, is preposterous.

The style in which the arch and column enter into direct combination with each other, and for which there is no specific name, has at all events some economical recommendations, inasmuch as shorter columns, and fewer of them, are required, than would be necessary for the same height and length according to the *trabeated* mode. In itself, too, it possesses

much 'capability;' yet, as is the case with every other style, the merit of the works produced in it depends upon the manner in which it is treated, and the talent brought to it. There is no style of the Art so poetical that the flattest prose may not be made out of it; and hardly any so utterly prosaic as to be incapable of being kindled into poetry by the Promethean torch of geniality—artistic treatment, and, *con amore*, æsthetic feeling.

INTERCOLUMNIATION.

Although Intercolumniation consists only in regulating and determining the spaces between the columns, and consequently does not affect the nature of the composition,—for a tetrastyle, hexastyle, &c., would still be such, no matter how narrow or wide the *intercolumns* or intervals between the columns may be,—very much depends upon it, with regard to expression and effect. How intercolumniation is regulated in the Doric Order has been already explained at page 20: in that, the distances between the columns is governed entirely by the triglyphs of the frieze, so that there can be no medium between *monotriglyphic* and *ditriglyphic* intercolumniation, accordingly as there is either one or two triglyphs over each intercolumn. But in the other Orders there is no such restriction; in them the intercolumns may be made wider or narrower, as circumstances require, but of course under the guidance of judgment and good taste; for what is left à *discretion* is not always very discreetly used. Vitruvius and his followers, however, have not cared to trust to individual discretion or indiscretion, but have fixed certain positive and distinct modes of intercolumniation, viz. five,—perhaps out of compliment to the *five* Orders, to wit:

Pycnostyle, or *closely set*, in which the intercolumns are one diameter and a quarter, or a half, in width.

Systyle, in which they are two diameters wide.

Eustyle, or *well spaced*, in which they are two diameters and a half.

Diastyle, in which they are three diameters.

Aræostyle, or *thinly set*, in which they are four diameters.

Let us repudiate for Architecture all such formal act-of-parliament legislation, and take pycnostyle and aræostyle as the greatest allowable degree of closeness or of distance at which the columns can be placed; and it follows that between such maximum and minimum any intermediate measure is admissible, and that there is no occasion to fix it positively and arithmetically, and make distinctions which are, after all, only arbitrary. There are a great many matters in design which must be left to the Architect, and intercolumniation is one of them. It is not possible to have precise rules for every thing, neither is it desirable; for if every thing in it could be done by rule, Architecture would forfeit its nature as one of the Fine Arts, and be reduced to a merely mechanical one. What is done by rule can be done by one man just as well as by another.

Excepting the terms pycnostyle and aræostyle, which are useful as expressing the greatest degree of closeness or of openness of intercolumniation consistent with well-proportioned arrangement, the others may be dispensed with. To designate one mode as *eustyle, par excellence*, is very much like saying that the proportions assigned to it, viz. $2\cdot30'$ or $2\frac{1}{2}$ diameters, are the very best, and all the rest comparatively defective; according to which doctrine, the *monotriglyphic* mode of intercolumniation usually employed by the Greeks in their Doric temples, and which answers to the character of pycnostyle, is not so well proportioned as what is emphatically called eustyle. Let it be whatever it may, as expressed in terms of the diameter of the columns, intercolumniation should always deserve the name of eustyle, or *well-proportioned*, by being such as satisfies the eye, and contributes to the particular character that befits the occasion and harmonizes with the other proportions of the structure. Pycnostyle, or *close spacing*, carries with it the expression of both richness and strength, the solids or columns being very little less than the voids or inter-

columns. *Aræostyle*, or *wide spacing*,—and *ditriglyphic* Doric intercolumniation may be called such,—produces an effect of openness and lightness, but also partakes of meagreness and weakness, owing to the want of sufficient apparent support for the entablature,—a very frequent fault in Modern Architecture, where frugality as to columniation has often been allowed to produce a degree of poverty which contrasts very disagreeably with that of the decoration affected by the Order itself. Intercolumniation ought to be made to depend in some measure upon the nature of the composition: a tetrastyle portico, for instance, or a distyle in antis, admits of wider intercolumniation than would be suitable for an octastyle, because pycnostyle, where there are only three intercolumns, would produce too great narrowness of general proportions for a portico.

Hardly is there need for observing, that be their proportions what they may, the intercolumns in a colonnade or portico must be all alike; nevertheless in a Grecian Doric portico there is, as we have seen, some difference, the two extreme intercolumns being there narrower by the width of half a triglyph. There is, besides, another exception from the general principle, for the centre intercolumn of a portico was frequently made somewhat wider than the others, in order to mark the entrance, and the better to display and afford greater space for access to the door within.

Another mode of columniation and intercolumniation is that which has sometimes been practised by Modern Architects, and combines the two extremes of pycnostyle, or still closer intercolumniation, and *aræostyle*. This consists in coupling the columns and making a wide intercolumn between every pair of columns, so that as regards the average proportion between solids and voids, that disposition does not differ from what it would be were the columns placed singly. Although denounced by some critics, more especially Algarotti, as altogether licentious and indefensible, and although it is not to be especially recommended, or indeed practicable on

every occasion, the coupling of columns may, under some circumstances, be not only excusable, but advisable and proper. As is the case with almost everything else in matters of art, all depends upon *how* it is done, and whether with or without sufficient reason. That there is no classical authority for it, is no valid reason against it; in the constitution of the ancient temples there was nothing to require or *motive* it. It may be conceded, however, that coupled columns, forming a prostyle surmounted by a pediment, are objectionable; because where so strong a resemblance to the antique model is preserved in other respects, a departure from it in regard to the disposition of the columns has a disagreeably disturbing effect.

SUPERCOLUMNIATION.

Although Supercolumniation is not warranted by Greek precedent in the application of the Orders, it may not be improper to take some notice of it here, in connection with the subject of Columniation generally. The placing one tier of columns above another, whether both tiers were of the same or two distinct Orders, was not practised by the Greeks, at least not for the exterior of their edifices, but merely within them, as in the *cella* of what is called an *hypæthral* temple, having a range of columns along each side, above which a series of shorter ones were placed for the purpose of rendering the total height equal to that then occasioned by the upward-sloping roof.* Very little, however, is now positively known respecting such upper Order in the interior of a temple, nor do conjectural representations of such expedient for eking out the required height by means of two tiers of columns with no more than a horizontal beam or architrave between them, say much for it on the score

* In his 'True Principles of Beauty' Mr. Fergusson has shown very ingeniously how the whole interior of such temple could have been roofed over,—whether it actually were so or not,—and at the same time light freely admitted. The idea is as valuable as ingenious, because applicable on many occasions to modern practice among ourselves.

of æsthetic appearance. The system of piling up Orders, or different stages of columns, one above another, originated with the Romans, yet even with them it was not employed for their temple architecture or other structures exhibiting what strictly answers to the idea of columniation, but merely such as were upon too large a scale to admit of the application of columns at all as their decoration, otherwise than by disposing them in tiers, and so dividing the elevation into a succession of stories one over the other. This method was afterwards adopted by the architects of the Palladian school, and has been occasionally practised in this country. The front of the Banqueting House or Whitehall Chapel* is one noted instance of it; and another more recent one is the new portion of the Carlton Club House. The first-mentioned building—all that was ever executed of Jones's magnificent scheme for a metropolitan royal palace—exhibits two Orders, viz. Ionic and Corinthian on an exceedingly low rusticated basement; which last would have been better had its small blank windows been omitted, or had they been expunged when the front was renovated, by the courses of masonry being continued uninterruptedly: for, evidently useless, they are also the reverse of ornamental, inasmuch as they occasion a look of ordinariness and littleness. The other building, which is undisguisedly a copy of Sansovino's Biblioteca di San Marco at Venice, with some slight variations,† similarly exhibits two Orders—a Doric and Ionic; and the latter, whose capitals are far more satisfactory representations of Ionic than those in Jones's work, is remarkable for its violation of all precedent and rule; its entablature being increased to double the height usually assigned it, or even rather more. Yet great as

* It is a pity that when the two fronts of this building were repaired and restored some-years ago, that its north and south ends were not faced with stone.

† That is, as regards the mere external plane or geometrical elevation; for, as Mr. Garbett has pointed out (page 104 of his Treatise), the disparity between the original and the copy is in other respects quite prodigious.

is the license, it is productive of grandiose effect by the entablature serving as an adequate crowning to the entire elevation; whereas, in a single Order placed by itself, the like proportions would show as preposterous; although there would not, in such case, be what here renders the great exaggeration of the upper entablature all the more evident,—namely, immediate contrast between it and the one below, which ought, *secundum artem*, to have been the heavier of the two, since it belongs to the Doric Order. The success of the license proves it to have been a *masterly* one,—that of an artist who showed himself privileged to break through precedent for himself and to set precedent to others, as has been the case in the Pall Mall structure.

Sometimes all the three Orders are employed in as many tiers of columns or pilasters. In other cases, the two extreme Orders,—that is, the Doric and Corinthian,—are brought together; of which what is now the inner court of Buckingham Palace affords a more striking than satisfactory example; for, as if on purpose to produce decided architectural antithesis—not to call it incongruity—different styles as well as Orders are there placed in immediate contact with each other, the upper one being Corinthian and the other a Greek Doric, not only of exceedingly plain but of very imperfect and anomalous character, since, instead of being rendered more than usually ornate and befitting a palace, the frieze is suppressed altogether, and nothing left but a mere blank surface beneath the cornice.*

The convenience attending supercolumniation is, that by placing one Order upon another, greater altitude is gained without corresponding increase of dimensions for columns and

* Had it even been intended to convince us how unfit the Greek Doric is for combination with any other, and with fenestration and Italian modes of composition;—how insignificant and poor it shows when executed on a petty scale and reduced from the rank of principal to that of a subordinate in the general design;—hardly could it have been accomplished more completely than it was in Nash's design for the Palace.

entablatures. Yet that is counterbalanced more or less by sundry inconveniences. One of them is, that unless the same Order be employed throughout and repeated for every vertical division of the building, there are as many different characters, or what ought to strike as such, as there are Orders. Another is, that altitude is obtained not by continuity, but rather by interruption and addition,—by breaking off and then beginning afresh, as it were : consequently the greater the number of the Orders so employed, the more diminutive do they become in comparison with the general mass of the edifice. Nor is it the least inconvenience or objection of all, that the more highly enriched and delicate capitals and cornices, being the uppermost ones, are removed out of sight, they being upon no larger scale than they would be were the same Order, having columns of the same diameter, placed upon the ground. It would seem, then, that some exaggeration is not only allowable but requisite to make up for what is lost by disproportionate distance,—that is, a distance out of proportion to the scale or actual dimensions of the object. The details, for instance, which would show themselves distinctly were the Order placed on the same level or thereabouts as that on which the spectator stands, lose much of their effect and importance if removed to double that distance from the eye, or perhaps more, without being, therefore, at all increased—if anything, rather diminished in size ; and not only that, but the intercolumns in the upper tiers become wider than those below.

ANTHROPOSTYLE OR ANTHROPOMORPHIC PILLARS.

As human figures have sometimes been employed in lieu of columns, and as both classical precedent for such *Anthropomorphic* pillars is furnished by a small building attached to the Erechtheum at Athens, *Anthropostyles*, or statue-columns, may now without impropriety obtain some notice here, although they were not spoken of in our original edition.

The distinctive names given to male figures of the kind are Persians, Atlantes, and Telamones : the first, which is a rather

vague and arbitrary one, to those in loose attire or imaginary Persian costume; the second, to those which are placed under an architrave, in the attitude of Atlas supporting the globe on his shoulders; and that of Telamones (from the Greek *τελαω*, to bear or support) to such as somewhat similarly support an entablature, with bended arms and their hands on their shoulders.* For female figures the general term is Caryatides, which are almost uniformly represented in an erect attitude, without any apparent effort to sustain any burthen or load, as is the case with Telamones and Atlantes, both of which manifestly display strength and muscular action. Another distinction between male and female figures of the kind, which ought to be attended to, is that the former admit of being greatly enlarged beyond life size with far less impropriety than female ones; there being something less unnatural in the idea of a colossal man than of a colossal woman. Caryatides, therefore, are fitter for such purposes and situations as do not require them to be of inordinately gigantic stature.

Anthropomorphic pillars can, of course, be employed only in rare and exceptional cases, if only on account of their expensiveness; yet that is no reason for prohibiting them altogether, which many, it seems, now would do, as little better than arrant absurdities, notwithstanding the classical authority for them. Yet, if there be absurdity in employing statues to perform an office which living persons could not, it is still absurd, though perhaps in a less degree, to put them in niches, or on the tops of buildings, where we should feel alarm at seeing any one standing. No one in his senses mistakes a stone figure for a living human being, more especially if it be larger than life and employed as an architectural member. The chief circumstance that might fairly be urged against statue-pillars has been overlooked,—namely, that the general shape of the human figure is the reverse of that required for a

* The entrance loggia of the new Imperial Museum at St. Petersburg has ten colossal figures of this kind, placed sideways (therefore facing each other) against the piers and their antæ.

column, inasmuch as it is much smaller and slenderer at its lower extremities than across the chest and shoulders, therefore resembling what is called a *terminus* (a bust or half-figure growing out of a pedestal which tapers downwards). In the Greek Caryatides, however, of which we have examples, the dimensions below suitable to a column were produced in the happiest and most satisfactory manner by ample drapery descending in folds quite to the feet, so as to render the whole of the lower part of the figure from the waist a solid mass of stone, of bulkier proportions than any Doric columns, the entire figure being only four diameters high; which proportions entirely contradict the ridiculous notion of the Doric column being proportioned according to the male, and the Ionic and Corinthian according to the female figure.

As the architrave could not rest immediately upon the head of the figure, in order to lessen the idea of pressure and to produce architectonic junction between such pillar and its entablature, the head has a sort of cushion or cap on it, and upon that is placed a carved echinus and its abacus. Modern architects have occasionally placed a complete Ionic or Corinthian capital on the heads of their Caryatides. Some have also suppressed or cut off the arms of their figures, as is the case with the celebrated Caryatides by Gougeon in the Louvre.

Were it not that so obvious a principle has frequently been strangely violated by modern architects and sculptors, it would scarcely be necessary to observe that in all anthropomorphic pillars, constrained postures and attitudes of action should be avoided. The expression should be tranquil and quiescent; there should be a certain degree of architectonic formality, but without stiffness, and the figures should appear, in military phrase, *to stand at ease*.

Had Inigo Jones's ideas for Whitehall been realized, the grand circular court of that palace would have exhibited the greatest display of anthropomorphic pillars ever attempted in modern times, for there would have been two Orders of them, viz. a

lower one of Persians or draped male figures beneath a Doric entablature, and the upper one of Caryatides, with capitals and entablature of the Corinthian Order, making in all sixty-four such statues; the male ones 24 feet high, the others 21 feet. Yet it may be questioned whether so many human figures placed between arches and windows, after the manner of engaged columns, would not have produced a somewhat uncouth though certainly a most striking effect, and have dwarfed the rest of the architecture.

Besides entire figures, either *Hermes'* pillars or *Termini* are occasionally used as substitutes for columns of the usual form, when required to be only on a small, at least a moderate scale. The first mentioned consist of a square shaft with a bust or human head for its capital; the latter of a half-length figure rising out of, or terminating in, a square shaft tapering downwards; which diminution at the base is, however, evidently improper where such figures are employed not in lieu of statues, but of columns supporting an entablature. *Hermes'* pillars seem to be in greater favour with modern German than with English architects. The former have not unfrequently employed them for the decoration of windows, and sometimes without observing any sort of tolerable proportion between the bust and the shaft on which it is placed, the latter being so extravagant in height as compared with the other, as to suggest the not very agreeable idea of a head stuck upon a pole; at any rate, the head itself is dwarfed into insignificance, and shows little better than a mere ornamental knob.

While we are upon this subject, it may not be altogether improper to offer a few remarks relative to the employment of statues as architectural decoration: notwithstanding that the Greeks applied sculpture to their edifices very liberally, it was almost invariably in groups of figures placed within a pediment, and in reliefs upon friezes, or in frieze-like panels, rarely if ever in the form of single statues. The Romans, on the contrary, affected statues, in which taste they have been followed by the moderns, sometimes with more of lavish prodigality

than propriety. Besides that, figures of the kind can never be properly viewed, or indeed, otherwise than to great disadvantage, when planted up aloft as acroteria upon a pediment, or on the pedestals of a balustrade (the usual mode of disposing them), where they become little more than mere accessories, and of little or no interest whatever in themselves: they seem to stand very insecurely in such situations, and produce no better effect than so many pinnacles; consequently, if at all numerous, impart to the summit and skyline of the edifice a certain bristling appearance, better suited to the character of the Gothic than of the Classic style. Nevertheless, the hoisting-up fashion has been carried to such preposterous extent that even the monumental portrait-statues of eminent public men—of which the features ought to be plainly distinguishable—have been exalted to such an unhappy pitch of loftiness that all likeness, except it be that lodged in a cocked-hat, is lost. A huge solitary column is itself a solecism, and a puerile though pompous conceit, notwithstanding that there is Roman precedent for it; but to place what purports to be not a mere figure but a portrait-statue on the summit of it, is to add to solecism nothing less than downright blunder.

There are many ways of disposing statues in combination with architecture, which would not only be much more rational, but be attended with greater artistic effect than those that have hitherto been usually practised. Of statues within porticoes, or occupying the extreme intercolumns of a portico or colonnade, we have no examples. Neither have we any instances of their being applied in connection with the extreme columns of a portico, by being placed either in front of, or laterally to them. The pedestals at the extremity of the stylobate on which the portico of the National Gallery is raised present an admirable situation for figures of the kind, as do also the open colonnades at Hyde Park Corner.

We have now terminated our examination of the Classic Orders, explaining their elements, constitution, and several

characteristics, an acquaintance with which forms, indeed, but a small yet a very essential portion of architectural study. By restricting ourselves to bare matter-of-fact, by being less minute in our remarks, we might within the same compass of pages have produced a treatise that would have been at once more copious and more superficial. Proceeding upon the principle of *multum haud multa*, we have endeavoured to engage the reader's attention, and induce him to take an interest in the subject by pointing out to him reasons and causes, and thereby putting him in the way of thinking for himself. Should we have effected that, and should we have disabused him of the prejudices, and the crude, confused, and contracted notions generally entertained in regard to the Orders, even by otherwise well-informed persons; or should we have armed him against them, we shall have accomplished the *multum*—the main point of all, and shall have prepared him for acquiring the *multa*, or further information from other books, with comparative facility. *Much* shall we have taught, and much will he have learnt, should he now reject the equally vulgar and absurd doctrine of the Five Orders, relinquishing it to schoolboys and schoolmasters,—to the plodders who work by pattern, and design by rote and routine. Much, very much will have been learnt by the reader, should he have learnt from what has here been said, to observe and compare, examine and reflect, and to regard the so-called Orders not with the eyes of a mere builder, but with the intuition and feeling of an artist, receiving them only as general types of their respective characters, which, after being diligently studied, are, instead of being slavishly copied, to be freely treated with congenial gusto.

APPENDIX.

RUSKIN'S DOCTRINE CONCERNING THE ORDERS.

HAVING gone through the THREE original and strict Orders or families of columns, explained their elements and constitution, and vindicated for them artistic independence of those petty, cramping, and debasing rules, which would render them so many dull, stereotype forms, and cold, petrified ideas,—we come now to speak of what we have thought advisable to reserve for this place, instead of stopping to notice it while speaking of the Ionic Order. Since the publication of the first edition of this treatise, some marvellously original views concerning the Orders have been broached by Mr. Ruskin, a gentleman of no small celebrity, it would seem, as a most eloquent writer and an equally profound thinker,—profound enough, no doubt, because if there be any meaning at all in some of his thoughts and expressions, it lies at such fearful depth below the surface, that, without making a descent in a diving-bell, it is impossible to get at it. Starting a perfectly novel theory, without the slightest misgivings as to its practical value, he makes short work with the Orders, by reducing them to two, viz. Doric and Corinthian, and getting rid of the difficulty attending the existence of another, by the simple and assuredly very convenient process of boldly denying the Ionic to be any Order at all; after having previously (in his 'Seven Lamps') insolently stigmatized its capital as "an exceedingly base invention." Nor is 'insolently' at all too strong a term for the occasion, for insolence assuredly it is for a man bluntly

to vilify what has all along been admired as a beautiful combination and ingenious adaptation of graceful curvatures and flowing forms, without condescending to allege any sort of reason for heaping upon it the virulent and wholesale abuse which he does. However, that belongs to Mr. Ruskin's peculiar mode of criticism; for though he is apt to descant with tedious prolixity on the forms and carvings of mouldings, and similar minutiae, when it comes to deciding the reputation and character of an entire style, a single defamatory epithet is made to do the work of execution, and slay indiscriminately whatever is so unlucky as to belong to the style that happens to be spoken of. Thus we are assured that our English Perpendicular is '*detestable*;' the entire art of the Renaissance,—or that which has prevailed more or less throughout all Europe, from about the middle of the fifteenth century,—is nothing less than '*pestilent*;' and Alhambra ornamentation is, after the same fashion, despatched to the shades at once by the stiletto term '*detestable*.' In imitation, perhaps, of Hamlet, he '*speaks daggers*' more than once, condensing both accusation and verdict into a single reproachful word; which species of brevity on such important occasions is all the more remarkable and unsatisfactory, because he frequently indulges in mere frothy, vapouring cant to such extent that it would be wearisome, did not its grotesque absurdity render it amusing.

Drawn by his crotchety fancies into a dilemma, Mr. Ruskin had no other alternative than either to renounce the honour of forming a perfectly new theory, or to strike out the Ionic from the number of the Orders; so, with consummate modesty, he adopts the latter course. Never was there, nor ever can there be, he says, more than two primary Orders, or distinctive classes of columns, which are to be ranked as Doric or Corinthian, accordingly as the general profile of the capital is of convex or concave curvature. Now, were there no objection to this dogmatic assumption—and it is certainly nothing more—it may fairly be alleged against it as a defect, that it makes the entire character of an Order to concentrate in the capital,

and, moreover, in one single circumstance of it, namely, its general outline or contour. No account is taken of proportions with regard to the column, or of actual bulk in the capital itself (in which last respect the Corinthian differs from the Doric as widely as in every other particular); none of expression, or the degree of it, whether it be that of plainness or embellishment, of simplicity or luxuriance. In fact, according to Mr. Ruskin's doctrine, a capital might be transformed from Doric into Corinthian, or *vice versa*, without any other change than that of converting its profile from convex into concave, or from concave into convex; which assuredly goes far to convict it of defectiveness, if not of absurdity also.

On finding that the theory he had adopted afforded no room for the Ionic, either as an independent Order or a satellite one of either of the others (as the so-called Tuscan may be said to be of the Doric, and the Composite of the Corinthian), almost any one else would have suspected that he had committed an oversight. Not so, however, Mr. Ruskin; he hews through the Gordian difficulty at once, by boldly asserting Ionic to be no real Order, but merely the 'phantasm' of one. The phantasm, forsooth!—would that we could exchange some of our realities for phantasms half as good! Now, so far is it from being either a phantasm or chimera, or capricious abortive attempt, that it was an actual living style; fraught with vital energy, and displaying various moods of beauty, formed upon one common type, however dissimilar some of them may be from others. If not an Order, it was at all events a *Style*, which is something infinitely more and better; and it was one of the only two styles which can properly be called Greek, for if the Corinthian or foliaged capital was originated by the Greeks, the Order itself or Style was developed and perfected by the Romans. That Ionic has been degraded in modern times from its original and real to a merely nominal rank,—deprived of its power and privileges as a Style, and reduced to the subordinate condition of a mere Order, in the technical, low, and limited meaning of such term, is not to be denied;

but then that is no more than what has happened to both the other Orders likewise. We have Doric buildings,—that is, buildings put into the livery of Doric columns,—but otherwise without a particle of Doricism, or even artistic *nous* in them ; and, in like manner, Corinthian ones without aught of Corinthianism save the ordinary badge of it.

Besides being extensively practised by the Greeks, and so far of incontestably classical legitimacy, the Ionic has always maintained its rank as a distinct Order, even when known only through the medium of enfeebled and insipid Roman or Italian translations of it, which are for the most part such as almost to justify Mr. Ruskin's condemnation of the capital, notwithstanding that such examples were in their time considered not only irreproachable, but so positively excellent as neither to require nor admit of improvement. Now granting for mere argument's sake that so far from deserving censure for his unqualified vituperation of the Ionic capital, Mr. Ruskin is entitled to praise for having risen above inveterate prejudices ; that he is in the right, and it is the Greeks themselves, and the admirers of the Ionic dialect of their architecture, who have been all along in the wrong, we have reason to become exceedingly mistrustful of Greek taste in other matters also, more especially when we find that Mr. Ruskin has "convicted" the Greek *fret* of ugliness,—at least so he fancies, and has so decided. Happily, however, for the Ionic capital, he gives us to understand that he can assign no better reason for his dislike to it than that contained in the well-known lines—

" I do not like thee, Dr. Fell," &c.

Our pity, therefore, may be transferred from the Ionic capital to Mr. Ruskin himself, and the unfortunate idiosyncrasy of his taste, which, while it is shocked at the baseness of invention displayed in the Greek voluted Order, is quite in raptures with the barbarous façade of St. Mark's at Venice, which he, with consummate intrepidity, declares to be "as

lovely a dream as ever filled the human imagination!"—a dictum that ought to pound the Parthenon into dust.

With regard to the actual origin or invention of the voluted capital, a new hypothesis has lately been started by Mr. Fergusson, in his '*Elements of Beauty in Art*;' which derives it from the class of Persepolitan capitals represented in the annexed figure, and which he calls *Proto-Ionic* (*i. e.* First or incipient Ionic). The discovery of any element of the Greek voluted capital in that truly monstrous combination of incoherent forms is at all events ingenious, because few will be able to detect any similarity whatever between that and the Ionic capital, even when directed to look for it. There is, indeed, on each face of the upright block forming the third or top division of the capital, a sort of *volute* or scroll, partly unrolled and curling up again below; yet between such inconsiderable, fragmentary, and seemingly purposeless bits of detail, and such an admirably adjusted composition as the Greek Ionic capital, the difference is immense. There is scarcely any analogy whatever between the two, except that the volute or scroll shape occurs in both,—but as to resemblance, it is no other than that between Macedon and Monmouth which is pointed out by Fluellen. The very particular that is supposed to constitute likeness, serves only to render the disparity between the two styles of capital all the greater; wherefore, if the Persepolitan one was really the germ out of which the other developed itself, we have an instance of the most marvellous artistic transformation that ever was accomplished; in which arbitrary nonsense is exchanged for admirably studied æsthetic effect,—deformity is metamorphosed into beauty, and uncouthness transfigured into loveliness and grace. The referring us then to such source for the origin of the Ionic capital, is far more complimentary than not to the



Proto-Ionic capital,
Persepolis.

taste of the Greeks, and not to their taste alone, but their power of felicitous invention also ; since to be able to discover the elements of beauty buried beneath ugliness is surely *invention* of the most enviable kind ; to be able to transmute barbaric lead into the noblest æsthetic metal is the worthiest species of alchemy.

Although the foregoing derivation of the Ionic or voluted capital appears somewhat visionary, it may be accepted as an instructive myth, exemplifying the possibility of extracting pregnant hints and happy ideas from the most unpromising sources.

However amusing it may be to note fancied or even real yet accidental resemblances of the kind, it is quite futile to attempt to establish any sort of theory as to the origin of particular architectural forms from the similarity they happen to bear to other objects, let it be ever so distinct. In a note at page 13, what the Doric capital bears a likeness to has been pointed out, but most assuredly we do not for a moment suppose that its configuration was derived from what may be made to exhibit the same combination of square and circular forms as the Doric abacus and echinus. Neither can any person in his senses imagine that the so-called 'Horse-shoe' arch of the Arabians was purposely so fashioned in direct imitation of the ignoble thing whose name we have given to it. Nay, it is somewhat strange, that those who first bestowed such undignified appellation on it, should not have perceived its resemblance to a Mahomedan symbol, and have denominated it the CRESCENT arch ;—which, it deserves to be remarked, accords so admirably with the *crescent* or bulbous domes which are such frequent features in the same style.

To quit these digressional and perhaps somewhat too discursive remarks, we return to what gave rise to them, by standing up for the beauty of the Ionic capital quite as boldly, and with quite as much show of reason, as Mr. Ruskin has denied it. Fortunately, his sneers and carpings at Greek architecture are rendered comparatively harmless,—at any rate, somewhat

amusing, by the highly-laboured sentimental twaddle with which they are worked up, as for instance in what he says at page 341 of his 'Stones of Venice,' concerning the Greek scroll, which he supposes, or pretends to suppose, to have been intended to represent or symbolize the sea!

For contradicting Mr. Ruskin, we have sufficient precedent, and that too furnished by himself, since by no one has he been more flatly contradicted as to what he says in one place than by what the very same John Ruskin has uttered in another. He may, indeed, be best described in his own words, as "an idler on the earth, chasing the shadows of his own fancies;" and who more than once plunges plump into arrant nonsense in his will-o'-the-wisp chase after peregrine, fantastical phrases, and alembicated, double-distilled conceits.

APPENDIX.

ON THE POSSIBILITY OF A NEW ORDER.

It will not be irrelevant to our purpose to say something concerning the invention of a new Order, or, rather, the possibility of such invention, which has almost invariably been denied, not only in a very peremptory and off-hand manner, but, strange to say, with a sort of scornful exultation at the failure hitherto attending every attempt to make any addition to the present Orders; and some have thought to settle the matter for ever by the equally *naïve* and stolid remark, that 'We do not *want* any other Order, those already known being quite sufficient for every purpose'! And so it seems, when we find a single pattern example of one and the same Order can be made to serve for a score of buildings, all different in purpose.

Premiums have been offered for a new Order, but in vain, for they have elicited nothing better than some feeble and insignificant variations of the Corinthian capital, more or less inartistic also. Other attempts have been made, and they have been all more or less signal failures. What then?—the attempts themselves convicted those who made them of being so utterly destitute of all æsthetic power and feeling, that it would have been a miracle had they succeeded. Marvellous also would it have been if the mere offer of pecuniary reward, let it be ever so liberal or even extravagant, could call forth an original conception of the imagination, just when it was asked

for, more especially if asked for at a time when all exercise of aught worthy the name of artistic imagination had been stifled, and in a manner forbidden. Inspiration will not obey even royal commands: the hour of its coming no man can tell; only when it does come, let it be *welcomed*.

The teaching and training pursued with regard to the Orders as established by methodized system, were better calculated to produce a blind superstitious reverence for mere traditional forms and mere conventionalities than to lead to really thoughtful study and thorough artistic examination of them. Although those examples which had been set up as standard models of them were inferior to or else widely different from the types they were supposed to represent, they were regarded as so perfect of their kind, that the idea of treating them at all otherwise than according to what had become prosaic routine, was scouted as reprehensible; while that of improving upon them (*i. e.* the several Orders as then practised) was looked upon as downright insanity.

Under such circumstances, what hope was there of any one producing, not a new Order, but even so much as a new capital stamped by original conception, and well studied in all its details? All artistic imagination in Architects had been as unnaturally stunted, dwarfed, and crippled as the feet of Chinese females; so that it would be hardly less hopeless for one of the latter to attempt to rival Atalanta in swiftness, than it was for any Architect of the seventeenth century, or even later, to essay aught that should be worthy of the name of a new Order, however new it might be in itself.

Owing, perhaps, to the ignorance of what really constitutes an Order, two primary conditions appear to have been overlooked by every one who has hitherto attempted to devise a new one,—the First of which is, that novelty of character shall extend itself to every part, so as to produce quite a different *whole* from any of the other Orders;—the Second, that such whole, though marked as distinct from and independent of the other Orders, shall nevertheless show itself to belong to

the same common family. Whereas the difference aimed at has been either too partial and inconsiderable for the fulfilment of the first condition, or else so inordinately great as to show utter disregard of the second.*

Now, in the former of these two cases, we do not, indeed, obtain a new Order, yet it is very possible, by adopting such course, to produce satisfactory varieties of the existing ones, and proceeding by degrees, and idea being added to idea, perhaps ultimately to arrive at what shall have grown up to be a distinct Order as compared with those which we now possess. This will, of course, be met by the '*No innovation!*' cry, which cry and that *for* originality, clashing together, perplex us not a little, since the one prohibits what the other demands. This contradiction is partly occasioned by '*originality*' being always taken in a good sense, and '*innovation*' in an unfavourable one,—an absurdity which is ably exposed by the late Sydney Smith. "To say that all new things are bad," observes that shrewd writer, "is to say that all old things were bad in their commencement; for of all the old things ever seen or heard of, there is not one that was not once new: whatever is now establishment was once *innovation*."

It is somewhat remarkable, too, that those who deprecate innovation as opening the door to licentiousness and all sorts of '*new-fangled*' whims, nevertheless tolerate the adoption of many tasteless solecisms and caprices, provided they be *old-fangled* ones instead of new. Although they are scandalized at the idea of any one's attempting—or, as they term it, presuming—to produce an original composition for a capital founded upon the antique, yet avowedly quite different in design, they do not object to our employing the poorest and tamest Italian versions of the Orders, the poverty-stricken Italo-Ionic capital included. Surely there exists talent at the present day, in the middle of this so much vaunted and self-vaunting nineteenth century,

* Emlyn's '*British Order*' was an extravaganza of the kind; the column consisting of a single stem below and then dividing itself into three slenderer ones, after the manner of a tree!

capable, if not of rivalling the classical antique, of surpassing by many degrees the taste of the Cinquecentish and first Architects of the Renaissance. If not, it is not for want of more abundant studies, though, perhaps,—for it is actually possible,—the very abundance of our studies may, by subserving to our indolence, have led to a result as unfortunate as unintended,—namely, that of sparing us the trouble of all further *thinking*. In fact, the lesson, of course decently disguised, has hitherto been—Do not presume to think for yourself at all in matters of taste and design; in them you have only to abide by what is already provided for you, and if people admire what is so produced, you may take all the credit of it to yourself; if not, you throw the odium of its bad taste upon those from whom you merely borrowed it. For every style alike, all further exercise of the inventive faculty is now interdicted, under the pretence indeed of maintaining the style itself intact, but also, it may be suspected, because indolence and incapacity find their account in such prohibition, as do critics likewise,—the latter being in their turn spared the trouble of carefully examining and thinking for themselves, they having merely to ascertain whether the work be *secundum artem*, or according to established recipe, and give their verdict accordingly. For whether it be in producing, or judging of what is produced, rules, which are but partial at the best, and may be erroneous also, are substituted for principles, and prejudice for rational appreciation. While Architects are expected to be artists, and to show themselves such, they are forbidden to avail themselves of the privilege belonging to them as such, and so, in the present unhappy state of their art, become no better than mere copyists. The very methods taken to preserve the art from corruption have deprived it of its former vitality;—preserved it, no doubt, they have; but how? by *mummyfying it*, by bandaging and swathing, by spicing and pickling it, and then exhibiting it in its rigid lifelessness and inert saplessness. Without some infusion of fresh thought from time to time to repair its

wasted energy, Art degenerates into mere Handicraft or little better; and is reduced to such a system of mechanical process, that, provided the means afforded them be the same, one man's work is almost as good as another's, nor does the best show us more than cleverness and taste in the application of previously existing ideas.

Hitherto the study of the Orders and similar matters has by most mischievous perversion been made, as Garbett well observes, to serve as the *substitute for thought*, and to blind us to the possibility of devising any other æsthetic modes of decorating columns than those which the Greeks and their immediate imitators have bequeathed us; for, be it observed, setting aside general forms and proportions, the conventional details resolve themselves into decoration. Of course such decoration ought to be analogous to the character of the leading forms and proportions, but otherwise admits of being almost infinitely modified and varied, as may best accord with other circumstances, and best befit the actual structure. Were that done, or allowed to be done, we should not see nearly the identically same columns (the differences between them being scarcely perceptible to any but a practised eye) applied indifferently to an hospital for lunatics, a custom-house, a post-office, a national museum, as the chief, and in some cases as the sole architectural badge, bestowed upon them as a cheap substitute for actual design, that is, cheap as sparing the labour of thought and study. No wonder, then, that such plodding mechanical routine should have brought discredit upon the whole of that modern Pseudo-Greek system; the only strange part of the matter is, that crude and incoherent patchwork, without any attempt to reconcile the conflicting elements, and the harshest contrasts merely put into juxta-position with each other, and so left, should have been tolerated. Nevertheless, it was not only tolerated, but admired and defended, upon the principle that the Order so applied being untouched, the purity of the style indicated by it was preserved from modern corruptions. The regard so

shown for purity of style might, however, without great uncharitableness be ascribed either to indolence or incapacity, or else to a degree of indifference truly discreditable to a follower of any of the Fine Arts.

If nowhere else, surely some latitude of design in the treatment of columns and entablatures becomes quite allowable, and in some degree called for, in interiors, such at least as do not profess to be of monumental character. Yet, whatever may be the Order adopted for such purpose, no regard is had to the difference of situation and other circumstances, but the example selected as the model is copied with most provoking fidelity, because, besides being pedantic and slavish, it may be improper also, or at all events it operates injuriously, by depriving our Architects of opportunities of experimenting with the Orders, where they might do so at little or no serious risk, because even failure would comparatively be of no material consequence. Besides, what does it avail that the columns and entablatures in a room are perfectly legitimate and orthodox, and according to accredited antique examples, if after all, as is generally the case, they are rather accessories than principals in the ensemble? *Pure* Corinthian columns, or whatever else they may happen to be, do not exactly harmonize with rococo-looking chimney-pieces and ceilings, or with fantastically crinkum-crankum Louis Quatorze furniture. At any rate, if we have actually studied the classical Orders to any purpose, and familiarized ourselves with the gusto of the antique generally, we ought to be able now to infuse something of the spirit and temperament of that style into our own conceptions. The possibility of doing so is indeed hardly to be questioned, when we find that Sculptors, and even Architects, can produce original ideas in correct classical taste for vases, candelabra, and similar productions of artistic design, for which no positive and pedantic rules have been laid down,—rules which, though they serve to bolster up mediocrity, and help mechanical dulness to pass itself off for art, operate as a clog upon genuine talent. We might

now be permitted to correct the error, well-intentioned as it was, committed by the leading Italian Architects of the sixteenth century ; who by *formalizing* the Orders, and giving each of them stubborn fixity, with little regard to correct æsthetic principles, deprived them of their original plasticity and vitality. It should, therefore, now be our endeavour to *unformalize* them again, for general use at the present day ; nor should we think of affecting Hellenism by a rigorous adherence to Greek models of the Orders, except in those comparatively rare cases, in which such style can be consistently adhered to, and fully carried out.

That another Order, which should prove decidedly distinct from those already known, yet at the same time partake of the same general physiognomy, and be likewise all-compact and consistent in its several parts, should be struck out at a heat, should, like as Minerva started from the brain of Jove, issue forth complete in every point from a single mind, is hardly to be looked for ; yet, were greater latitude of design granted to Architects, were they not only permitted, but encouraged to break through the present system of stereotype forms and details, instead of being deterred from any attempt to do so by the opposition, if not ridicule also, they are now certain of encountering, surely some among them could show themselves capable of giving us something better than crude fancies and random caprices. Those who scout the notion of that being possible, must suppose modern Architects to be, one and all, so totally destitute of artistic talent and intelligence, as to be unable to deviate from the strict letter of antique precedent, without forfeiting its spirit also, and running into extravagance and absurdity. We do not ask them to turn their backs upon precedent,—on the contrary, to keep their eye upon it, and to study it diligently, not with their eyes alone but with their brains also ; should they have done which they will hardly be in any great danger of going far astray. Former unsuccessful and ridiculous attempts of the kind prove nothing to the contrary, but merely that those who made

them were utterly incompetent to engage in them, inasmuch as they betrayed more or less, evidently either utter disregard, not only of precedent, but of rationality and the principles of artistic composition, or else immaturity of ideas, and sterility of imagination.

Of course it is not for every one to endeavour to break away from the trammels of literal conformity to precedent, either as regards the Orders or any thing else in architecture: nor indeed is it for any one to do so without due consideration, and without feeling satisfied that he can fairly account to himself and others for what he has done. Rash innovation upon established forms is, most assuredly, to be deprecated; yet, for rashness, there is as little necessity as there is excuse. Everything of the kind can be adequately tested beforehand, that is, previously to being actually carried into execution, by means of drawings and models, submitted to the opinion of competent judges. Studies of detail, whether as regards columns or anything else, are for the employment of an Architect's leisure hours, when he can apply himself quietly to the shaping and working out experimentally such fresh ideas as may have occurred to him, and which he ought to have noted down at the moment that they did so, revolving them, in the interim, in his mind. Were fresh ideas to be carefully and patiently *elaborated* and then revised, there would be little danger of their proving when produced to the public no better than crude abortive fancies, of which latter and downright barbarisms in composition we meet with not a few, even where the Order itself is correct, although it is so merely because it is a literal transcript from some standard example of it. Yet what avails such partial merit, which after all is but a borrowed one, if all the rest be quite at variance with it? * If we are not at all scandalized at

* The background or inner wall of the portico of St. Martin's church, and indeed the whole exterior of that building, affords a strong instance of utter incongruity of taste and character between the structure itself and the columns and pilasters with which it is decked out.

wholesale innovations in design, we might surely be less intolerant of partial innovations in matters which are comparatively only those of detail.

We shall, perhaps, be reproached with encouraging a hankering after, and "a morbid taste for variety, merely for variety's sake." Yet surely there is a healthy taste of the kind, as well as a morbid one; and if too great laxity and licence in regard to the exercise of invention tends to corrupt architecture, the restricting Architects to certain stereotyped forms for each of the Orders, or for whatever else may be the indicial features of the style employed by them, is to degrade both them and the art itself, by converting the latter from a Fine Art into one of mere routine and mechanical process. And if, as has lately been hinted, architecture affords at the present day scarcely any opportunity whatever for the further display of artistic mind and power, the sooner its followers renounce the ambitious title of Artists, and content themselves with taking their position along with engineers, surveyors, and builders, the better. Were greater freedom of design with regard to the separate constituent members of a style *permitted*, there would, in all probability, be, together with less of sameness in things of the same style, a far greater degree of conformity to one general style. The continual repetition of the same features, with little other change than that of transposition, soon causes a style to appear hackneyed and worn out. It is made to appear unable, because not allowed, to accomplish anything further: the consequence is, that satiety of it produces a sudden and capricious defection to some other quite different one, or even to several others simultaneously, of very opposite characters, and belonging to widely distinct periods, all however resembling each other in regard to being treated alike, namely, according to *precedent*, —*alias*, according to the system of mere copyism. The style of almost every century since the Conquest has now its new-hatched representatives in the nineteenth, which it seems is fain to take them just as it finds them, as if they were, one

and all, so thoroughly fitted to our present habits, wants, and purposes, as not to require to undergo any modification in order to adapt them to greatly altered circumstances.* Such architectural transplantings from by-gone times partake more of the nature of exhumations than *revivals*, not a spark of fresh active vitality being imparted to the original stock, which in every case seems doomed now to remain petrified, and so far, lifeless; whereas the architecture of the 'Renaissance' was an actual 'revival,' till it was nipped in the bud and checked by the formalists and precedent-mongers of the sixteenth century.

Instead of pursuing any further these ungracious yet not unwarrantable strictures upon the practice of confining ourselves to *ready-made detail*, we come more directly to the point, as far as the treatment of the Orders is concerned, by remarking that even where some modification of any one of them has been ventured upon, it has been confined almost exclusively to the capital, comparatively little or nothing having been essayed in regard to bases and shafts, even by those who have aimed at producing an entirely 'New Order.' Yet even Bases afford considerable scope for the display of thoughtful design, although they seldom admit of being made to consist of more than a series of mouldings. Fergusson, indeed, is of opinion that ornament may without impropriety be bestowed upon the foot of a column somewhat freely, as being clearly visible in such situation. The propriety of doing so depends, however, upon the situation of the columns themselves. The degree and sort of enrichment that would be unsuitable for bases standing immediately upon the ground or floor, would display itself strikingly in internal situations where the columns were raised upon a stylobate of such height as would allow their bases to be closely examined. Yet, however the base may be enriched or its depth augmented, the capital ought to preponderate both in its bulk and its decoration.

* The present Babel of styles and confusion of tongues in architecture will cause sad perplexity to future antiquaries.

With regard to the *shafts* of columns, they not only admit of other modes of fluting than those now practised, and which are in fact limited to two,—one appropriated to the Doric, the other common to both the Ionic and the Corinthian order,—but they are susceptible of varied ornamentation of a different kind. Where a more than usual degree of richness is aimed at, carving upon the lower part of the shaft, immediately above the base, can hardly fail to produce it. It is, indeed, what there is no precedent or warranty for in the pure antique, but there is in many of the Renaissance and our own Elizabethan examples; and *Fas est et ab hoste doceri*. No matter whence or from however impure a source a good idea be derived, so long as it be good in itself, and capable of being turned to better account than it hitherto has been. In all art, whatever is successful—whatever is productive of genuine artistic effect, is, *de facto*, *legitimate*, whether it be warranted by precedent or not. No matter how unclassical the style from which its adopter derives it, provided he can turn the hint so obtained to good account, and, by improving upon it, make the so borrowed idea another and his own.

One or more ornamental bands so slightly raised as not at all to break the general outline of the column, or excite the idea of discontinuity, but merely produce variety of surface, is surely a very warrantable mode of decorating the shaft. It is but a futile objection against it to say, that such bandeaus cut the shaft into so many separate pieces, for it would be nearly as reasonable to say that a bracelet twined round a lady's arm appears to dis sever the limb, or else cause it to look as if it had first been broken and then bandaged. It is possible to be too precise in such matters, and some are so ultra-rational that they would strip architectural design of almost everything that does not show itself to be expressly called for by actual purpose. Pediments over windows, key-stones to arches, cof-fered domes, ornamental masonry, or what is called *rustication*, even pilasters themselves, have all in turn been assailed by the strait-laced hypercriticism of pedants, puritans, and ultra-

rationalists, who care not of what or how many resources they deprive design, their business being not to design, but to set themselves up as dictators to those who do.

Very good reason, however, there is for objecting to the practice, even yet not entirely abandoned, of making the shaft of a column consist of *frusta*, alternately round and square, since that certainly does cut up and disfigure the entire shaft, more especially as the blocks or square pieces are made larger in diameter than the others, although difference of form would distinguish them sufficiently, if not even too much. When columns of the kind are attached to a rusticated wall, and the blocks upon the shafts correspond with the alternate courses of the masonry, so that the columns and wall appear bound together, such mode is tolerably allowable; whereas blocks of the kind upon insulated columns are a downright barbarism, and produce no other effect than that of grotesque clumsiness.* Still it does not follow that the shaft of a column on no account admits of anything extraneous being attached to it. For instance, a circular medallion affixed midway the shaft, and corresponding in its diameter with that of the column at that height, would be an equally striking and novel, and certainly not inelegant piece of decoration,—one, moreover, that would admit of infinite variety, and of being rendered significant also. A round plane or disc affixed to a cylindrical surface would exhibit a strong contrast, produced entirely by circular forms differently applied.†

That such hitherto untried ornamentation for the shaft of a column would be reprobated at once and off-hand by orthodox writers of a certain class, who, if they do not exactly admire, can tolerate, columns encumbered with a series of heavy square

* As may be seen by the columns of some of the porches to houses in the lower part of Regent Street, near Waterloo Place; where, besides being ugly in themselves, they are quite out of keeping with the fronts to which they are attached.

† Having introduced columns so decorated into a design of his own, the author feels little doubt as to their proving satisfactory in execution.

blocks upon them, is beyond doubt, there being ample precedent for the latter in the works of Italian Architects, but, as far as we are aware, none whatever for the mode here proposed. It is to be regretted, that a slavish and superstitious regard for *precedent* should be allowed to bar out all further invention, and thereby bring one important branch of architectural design (composition being the other) to a stand-still. We employ the styles which we adopt merely as so many dead languages of the art, incapable of admitting new words for the purpose of better describing new objects and expressing new ideas. A-propos to what has just been said, it will hardly be from the purpose here to meet, even if we cannot remove, an apprehension entertained by one Reviewer, whose judgment we are far from calling in question, because on its first appearance he spoke of this Treatise in most flattering terms. "Whilst we should rejoice," said that writer, "in seeing architectural genius developing itself in forms of beauty hitherto unappropriated, is there no danger of Mr. Leeds's advice being acted upon too literally for the credit of the national taste, or of those who may thus be tempted to degrade it in the estimation of strangers? There is." Certainly, no doubt, there is some danger; the question is, whether it would not be outweighed by great advantages. Besides, the advice is to be received *cum grano salis*: by no means either was, or is it, the author's intention to recommend that every one, whether gifted or not, with inventive power combined with artistic feeling and judgment, should break away from the beaten, therefore the safe, track, of established practice and authority. But are none to be bold, lest some should be rash and fool-hardy?—are none to be free, lest many should abuse their freedom? Are the vigorous and active to be for ever doomed to accommodate their pace to that of the indolent or the feeble? The many must be left to go on as they do now; but let us not, therefore, by invariably exacting strict compliance with the letter of precedent, debar those who are capable of doing so from advancing at all further. As an instructor and guide, Precedent claims our

dutiful respect ; but we have converted it from a teacher who informs, into a tyrant who enslaves our minds. Nay, Precedent itself rebukes us, our present system of design being quite different from that of other times, when, instead of merely repeating parrot-like by rote what it had learned from the past, design freely appropriated such new forms and appliances as circumstances might dictate. Although the PRINCIPLES OF ART ARE IMMUTABLE, ITS PHÆNOMENA ARE VARIABLE, AND SUSCEPTIBLE OF ALMOST INFINITE DIVERSITY.

Unhappily for both architecture and ourselves we have fallen into a double mistake, that of overlooking Principles, and of blindly adhering to and following Precedent, even when it leads us quite astray. It may, too, fairly be suspected, that it is in consequence of our ignorance or else disregard of the first that we submit as tamely as we do to the tyranny of the other. Our ultra-sticklers for the rigorous observance of precedent as the *sine quâ non* condition for excellence, insist upon the observance of it because there they feel themselves upon safe ground. They know what is according to Precedent, and what is not ; and in the latter case condemn and set it down as bad without further inquiry, having no other criterion than Precedent by which to judge, wherefore they treat every deviation from it as no better than very dangerous architectural treason and sedition.

To literal adherence to Precedent without regard to aught further than the most prosaic compliance with some particular example of an ancient order, may be ascribed the neglect into which the Greek and Roman columnar system has now fallen. So far were we from imparting any fresh elements of design to it, we did not, generally speaking, even catch its spirit ; for had we done so, we might, ere now, have succeeded in *naturalizing* it among us. It might have been made to strike root here firmly, and then to shoot forth fresh branches, and to develop its powers still further in new but cognate and congenial forms of beauty. We *stuck it up* in its native purity as we

fondly imagined, its Orders being jealously kept intact ; but, as surely might have been foreseen, it soon showed itself to be dry and sapless, wherefore we have now kicked it away.

Pretty much the same is it with every other style which we take up, forcibly transplanting it from its native soil of some former age, into our cleverly contrived *nineteenth-century conservatory*, to be there tended by precedent-adoring copyism. Changing our simile, we may allow copyism to be in some respects a useful nurse, at any rate a convenient one ; but it is also a *dry-nurse*, one wholly incapable of affording any sustenance to its charge. It can bandage it in swathing-clothes, and fondle and dandle, and sing lullabies to it,—and they are not unmelodious even to some older ears ; it can cram down the ready-prepared pap of precedent, but can supply no nutriment whatever from itself. Is Architecture now doomed to be henceforth ever in the leading-strings of some former style, and never again be trusted to go alone, as it was wont to do in former times ? Fain would we hope not, although for such hope there is at present very little ground. As yet the present century, which has displayed such marvellous inventive power in other departments of human ingenuity, skill, and industry, has in that of Architecture produced nothing which it can fairly claim as its own. At once proud, and needy, and indolent, it is content now to subsist upon borrowings, without even putting any of those borrowings out to interest, so as thereby to accumulate in time a fresh capital of its own.

Precedent merits our respectful regard, and attentive earnest study ; it is for our instruction and guidance ; it is a servile, bigoted reverence for it that is to be deprecated,—that anile and superstitious veneration for the past, which, by making the past a barrier against all further advance, inflicts an injury upon the present, if not the future. Crying out to us, “ Thus far shall ye go, and no farther,” it presumes to set limits to our faculties. It commands Architecture to look only in one direction, and that is backwards. No wonder then, if, like Lot’s wife, Art has now become converted into a pillar of salt,—

a mere rigid, inert body, retaining indeed its former outward shape, but devoid of all principle of vitality and motion.

To maintain that it is impossible for us now to add aught to any style, or at all to enlarge it by gradually introducing other forms and elements,—but of course in accordance with the original ones,—is very much like declaring Architecture to have become quite worn out and effete, and wholly incapable of producing more than it already has done. Orthodox such view of the matter may be, but assuredly it is not very cheering, nor at all calculated to excite and invigorate the artistic faculty. In like manner as a living language is continually receiving accretion and extension by means of new words and phrases, although its body and constitution remain unchanged, so a *living architecture*—a style actually practised by us—should be considered susceptible of similar increment; since, otherwise, it is reduced nearly to the condition of a dead one; and though by so employing it we may mimic the details and some of the separate features of its original productions, it is impossible for us to preserve the original physiognomy, unless we also adhere in every respect to express models, which, so far from being adapted to our actual present requirements, are more or less at variance with them, sometimes completely so.

We certainly have no occasion for Greek temples nor Roman amphitheatres, yet need we not therefore discard the ancient Orders and Greek and Roman elements, which are far better adapted for general application than are those of any mediæval style. Let us then avail ourselves of them, not literally but freely, and with artistic intelligence and feeling. What would be the actual result of such emancipation from what others deem wholesome restraints, but, in our opinion, are no better than fetters that enslave and manacle those who should be free, yet after all are no check upon general bad taste,—we pretend not to predict. If we are questioned as to that, our reply must be, like Fergusson's—We cannot tell. Possibly one result would be our obtaining what might fairly be accepted as a NEW ORDER; or if not, we might succeed in

shaping and working out for ourselves a really living and life-endowed style, based upon that of the antique, informed with kindred spirit, and stamped with kindred beauty and grace.

THE EFFECT ATTENDING COLONNADING AND ARCADING.

MUCH as has been written upon Architecture, one important circumstance appears to have generally escaped attention, neither notice being taken, nor explanation given of it,—which is, that columniation, or rather colonnading, is productive of a species of decided artistic effect unattainable in astylar composition, and likewise in that quasi- or semi-columnar mode according to which columns show themselves only as decoration in relief upon the face of a wall. Similar and equally indefeasible effect attends arcading, whether the arches be supported by piers or columns.* The sort of effect alluded to is, moreover, wholly irrespective of style or design, or indeed any æsthetic qualities or their contraries, since it manifests itself in the most opposite styles—in the most ponderous Egyptian as in the lightest Gothic, in the arcaded courts of the Alhambra as well as in the peristyle of a Greek temple or the Parisian Madeleine. Although not adverted to in professedly didactic works, the effect here spoken of never fails to make itself felt, although few seem able to account for it; and it is recognized and acknowledged in the expressive phrase ‘pillared scenery;’ pillars, no matter how denominated technically, or to whatever style they may belong, invariably conducing, although, of course, not always in the same

* The term ‘*columnar-arcading*’ would be convenient as describing and distinguishing the latter mode.

degree, to scenic and picturesque * character. The question then is, to what is such effect to be ascribed? The reply is, to what when once pointed out will be thought an exceedingly simple matter in itself, valuable as it is for its results. It arises then from the *duplication* of planes and surfaces, and the increased play of perspective, thereupon consequent. Nor is it owing to the more decided pronounciation of perspective alone, but also to that of *chiaroscuro*, as regards forcible contrast of light and shade, that both colonnading and arcading are productive of peculiar expressiveness.

Important, however, as the study both of perspective and *chiaroscuro*, or the distribution and apportioning of light and shadow, is in architectural composition, it is scarcely ever touched upon; or, if touched upon at all, is instantly recoiled from. Neither is sufficient attention given to outline, whether in respect to elevation or plan, as productive of or contributing to the other two sources of artistic composition. It seems to be generally considered sufficient if taste be shown in the individual features and details of a design; yet although as far as it goes, that is undoubtedly a merit,—indeed one that ought to be made almost a *sine-quâ-non*, it may not redeem from general insipidity, or from feebleness of expression and effect; more especially if mere finical elaboration *à la Denner*, that hardly shows itself,—at least does not show itself distinctly in the executed structure, has been trusted to for producing effect.

The one kind of artistic merit ought invariably, when

* After his usual oracular fashion, Mr. Ruskin defines the picturesque to be 'parasitical sublimity;' which is no doubt a very sublime, because an exceedingly obscure explanation—an Hibernianism that, which must be pardoned. No doubt, the sublime may enter into and enhance the picturesque; but the latter quality is surely quite independent of, and oft-times quite at variance with, the other. What, for instance, is there of the sublime, either parasitical or genuine, in a squalid, tumble-down hovel, in a thistle-eating donkey on a common, in a group of impish village children, or in many other objects which painters relish on account of their *picturesqueness*?

possible, to be associated with the other. There ought to be what is impressive, striking, and captivating at first sight, and also what will afterwards detain and gratify it. Nevertheless, of general effectiveness of ensemble comparatively little account is taken, notwithstanding that an enduring charm attends it, its influence like that of a fine prospect making itself felt unconsciously; whereas beauties of detail, like those of the parterre, require for the due appreciation of them to be minutely examined one by one. Even, too, as the most beautiful flowers and shrubs will not form a beautiful landscape, so neither will the most unexceptionable details form a fine piece of Architecture.

Valuable, however, as are perspective effects and those of light and shade in both interior and external Architecture, they appear to be almost always the result of mere accident rather than of study and forethought. Whenever they do occur, it is generally because they could not very well be avoided. Little pains seem to be taken to insure them; which is, perhaps, partly because such matters are passed over without notice in professedly didactic writings, and partly because professional men are in the habit of attending too exclusively to mere geometrical appearance, as shown either by elevation or section.

One of the most sensible things Mr. Ruskin has uttered, is his advice to students to "think in shadow,"—to which may be added, and in perspective also; for like those of light and shade, the accidents of perspective produce spirited variety, and impart the allurements of picturesque apparent irregularity and fortuitous combination of parts, where perfect symmetry and correspondence of parts are perceived by the mind to exist. The value of perspective effect may perhaps be best appreciated by the absence of it; owing to which latter it is that those unacquainted with the nature of geometrical representation look at elevations and other drawings of the kind with indifference, if not with dislike also, as being no better than technical, formal, and lifeless images of what they are intended

to show; in short, as belonging to the class of mere pattern and working drawings,—more especially if they happen to be those for an unexecuted building. Most assuredly such drawings neither are, nor claim to be, regarded as pictures, yet supposing them to possess due artistic merit, they ought to be recognized as productions of art; because, as Jovellanos has well remarked,* the sole merit which an architect can claim as purely his own, is that derived from the *forte*—the taste or the talent manifested in his ideas. The design of an edifice once perfected, its author's task in his capacity of artist or architect proper is terminated; for in all the subsequent operations of execution he officiates only as the superintendent or director of the works, or perhaps that charge is confided to some one else.

Very much more might be added on this head, but what has already been said will in all probability be deemed irrelevant to and widely digressive from the subject first started, and with having started which we will now content ourselves, serving both topics just as Alcibiades did his dog's tail—perhaps, too, for a somewhat similar reason.

WHAT STYLE?

THOSE who declaim so virulently against all kinds of shams, imitations, deceptions, and artifices in Architecture, that they seem to make no distinction between such innoxious untruths and the scoundrelism of lying, or the villany of forgery and false-coining,—those same outrageously virtuous, yet not particularly nice or over-scrupulous persons will nevertheless

* In his 'Elogio de Don Ventura Rodriguez,'—a most interesting piece of artist-biography, and not least of all so on account of its very copious notes, which comprise among other matters a rather extended disquisition concerning the character and origin of Gothic Architecture. As to Ventura Rodriguez, it may not be quite unnecessary to state that he was the great architectural star of Spain in the last century.

freely swallow, and encourage others to do the same, one particular species of unveracity—for 'lying' is an ugly word—by the wholesale. So far from making any objection to it, they earnestly recommend our reverting to and counterfeiting for the nonce some one of the by-gone mediæval styles; and systematically adopting some particular architectural *disguise*—which it ought to be, they are not yet agreed upon—as the most suitable and becoming costume and uniform for the buildings of this strongly although not strangely anti-mediæval nineteenth century! which said century, rich and all-potent as it is in other respects beyond any of its predecessors, either is, or is made to appear, utterly bankrupt in matters of art, and forced to bolster itself up to the best of its ability with Pre-Raffaëlitism in painting, and modern mediævalism in Architecture.

While numerous inventions and improvements in building and in all the mechanic arts subservient to that of Architecture have come up, we are called upon to ignore or abandon them by restricting ourselves to that for which precedent may be found in the edifices produced in the earlier periods of our civilization. Yet that any one mediæval fashion of building, whether English or Continental, can be found which would now be applicable to all kinds of buildings alike,—without being which, it could never become a universal style,—is exceedingly doubtful, or rather just the reverse, there being little or no doubt as to its impossibility. For churches, indeed, and for such quasi-ecclesiastical buildings as colleges and schools, also hospitals and almshouses, mediæval Architecture may still be consistently employed, it having been all along extant among us in those classes of buildings, many of whose structures are cœval with what are the 'foundations' of former centuries. In such cases architectural archaism contributes to character by the decided contrast it presents to the physiognomy of secular edifices. Whatever some may think or say to the contrary, the influence of association has much to do with Architecture, quite irrespectively of æsthetic con-

siderations. And with regard to the classes of buildings above mentioned, the archaism which may without impropriety or affectation be observed for them, is akin to that which tinges our version of the Holy Scriptures, and the language of our Church services, and which constitutes a peculiar style widely distinct from that of both our ordinary language and our secular literature.

Even were it practicable—which may very well be questioned—to revert now for general purposes at the present day to a style of Architecture which never contemplated, consequently could not possibly provide for them, would be rather preposterous, and would perhaps be attended with consequences the reverse of satisfactory to those who advocate its being attempted; if only because it would be absolutely necessary to innovate very freely, and in many cases to go quite contrary to precedent, unless essentials were to be sacrificed to appearances. One strong objection, were there no other, against the re-instating Mediæval Architecture as a catholic or national style, is, that it would be eminently artificial in principle, inasmuch as it would be at variance with our habits, with our tastes in all other respects, and with the general tendency and temper of the age. There is besides one stumbling-block difficulty—one calculated to set the several partizans of mediævalism at loggerheads—to be got over in the first instance,—namely, the choice of the particular style to be adopted. A strong and withal a strange feeling seems to have come up in certain quarters of late in favour of Italo- or rather Veneto-Gothic, as being so expressly suited to all purposes, that, without undergoing the slightest modification, examples of it would be thought quite at home even in the region of Pall Mall. Yet in our opinion that particular style is best characterized by the term we once heard applied to it, of ‘Old-maidish Gothic’—stiff, formal, prim, and meagre, and afflicted with a most disagreeable starvation look.

Renouncing Mediævalism in Architecture as little better than mere mummerly at the present day; to what style then

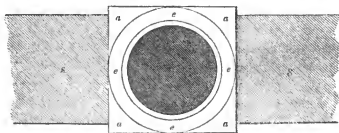
are we to look as that which would best serve us as a model on all occasions? The reply is at hand; that of the Renaissance, — vituperated, indeed, by John Ruskin, but ably vindicated by Charles Barry. Yet though we would advise the keeping *to* it, we would not advise the keeping *it* itself just where it is, but that we should endeavour to carry it on still further, purging it of its defects, which are not few, supplying its deficiencies, which, in comparison with our present greatly enlarged requirements, are many; and infusing into it that further plasticity which might without difficulty be imparted to it.

Renaissance and Greco-Italian—taking those terms in their widest signification—possess upon the whole far more in their favour for actual practice at the present day than any other style whatever. They constitute in fact the modern European style, as contradistinguished on the one hand from those of ancient Greece and Rome, and on the other, from those of mediæval Europe,—a style which, so far from having to be imported, has already struck root here so deeply that it has become almost impossible now to eradicate it. And what is perhaps not least of all in its favour is, that it is by no means yet worked out, in some respects hardly yet fully developed; nor is it so provokingly perfect, that we need absolutely to despair of improving upon it, or feel ourselves doomed to the bitter mortification of finding nothing left for us to do than to repeat by rote the ideas of those who have gone before us.

GLOSSARIAL INDEX.

WE here make one alphabetical arrangement serve the double purpose of an Index referring to the pages where the respective matters are treated of, and of a Glossary affording explanation, or further remark, as may be, where required. This latter is by no means to be considered a complete or general Glossary of Architectural Terms, but merely as an accompaniment to the present Treatise, and a specimen, perhaps, of what is still a desideratum, namely, a *real Lexicon*—that is, one which explains *things* as well as terms—of ancient and modern Architecture, similar to what has been provided with regard to the Mediæval Styles of the Art.

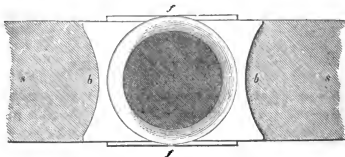
ABACUS.—The *plate* or shallow block forming the uppermost member of a capital is so called for the sake of distinction, for when a similar one is placed beneath the base of a column, it is called a *plinth*. The Doric abacus is spoken of at page 14, and is here shown in a plan of



the capital and architrave; *aaaa* being the angles of the soffit or under-side of the abacus which overhang the echinus *eeee*; and *ss* the soffit of the architrave. From this, the relation between the abacus and architrave, and how much the former exceeds or projects out beyond the latter, will be better understood than by the engraving at page 13, where the capital is shown only in *elevation*.

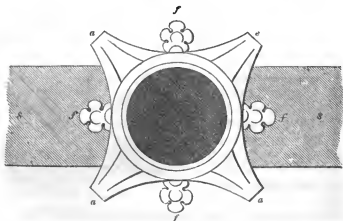
The next figure is still more indispensable for understanding the

conformation of the Ionic capital. (See page 33.) Here the abacus



shows itself only in front at *ff*, over the two voluted faces, the rest being concealed by the baluster sides *b b* of the capital, which extend beyond the abacus, and convert the general plan into more than a square. Although the channels and other details of the baluster sides are omitted, and only their general shape shown, the engraving explains how those sides are *reduced* (p. 34) by being hollowed out or curved concavely on the plan.

In the next, or Corinthian Order, a similar curvature is given to the



abacus itself on all its four sides; the capital of this Third Order having that in common with the First one, that it is quite regular. One great point of difference between the Doric and Corinthian abacus is, that in the former the angles are unsupported, and overhang the circular body of the capital, while in the Corinthian they are extended

onwards diagonally, as *aaaa* in the figure, and supported by the *caulicoli* or small volutes, which they in turn serve to cover. The letters *ffff* indicate the rosettes or flowers on the four faces of the abacus.

There is an example in the Vatican of an antique Corinthian capital, with a *square* abacus, whose sides are merely recessed or hollowed out concavely.

ÆSTHETICS—**ÆSTHETIC**.—A modern architectural writer condemns these terms as 'silly and pedantic' ones that have 'lately come into use in the Arts,' and as 'useless additions to the nomenclature' and language of art-criticism. In what respect 'Æsthetics' is at all more pedantic than 'Optics,' 'Mathematics,' 'Physics,' and other words of a similar class now familiar to English ears,—although they are all of them essentially Greek,—or more pedantic than a great many architectural terms which are not only Greek but altogether technical, it is not easy to divine; while as to silliness, there seems to be far greater silliness in rejecting, or objecting to, than in adopting terms which are not only highly expressive and convenient, but have found their way into every European language, from that of Russia to that of Spain.

The term *Æsthetics* implies the perception and the study of those qualities which constitute the beautiful and artistic, and form the finer essence of all productions of Fine Art. It carries with it, therefore, a more exact and philosophic meaning than the word *Taste*. In its adjective form, in which it more frequently occurs, it is particularly useful, as no adequate epithet can be substituted for 'Æsthetic.' Thus we speak of the 'æsthetic sense,' of 'æsthetic feeling,' or 'study,' or 'principles,' &c.; but we cannot say the 'tasteful sense,' or 'tasteful study.' As to the species of study just alluded to, no term may be required to designate it, because study of the kind is generally dispensed with for Architecture, an historical and technical knowledge of it being deemed sufficient, without any acquaintance with those comprehensive *æsthetic* principles of the Art which can guide us where technical rules stop short, and mere rules abandon us to error or to doubt.

ANTÆ, Doric, 22.

——, Ionic, 41.

ANTEFIXÆ.—Called by some *Greek Tiles*,—upright ornamental blocks placed at intervals on the cornice along the side of a roof, to conceal or rather terminate the ridges formed by the overlapping of the roof tiles.

ANTHROPOMORPHIC.—From the Greek *ἄνθρωπος* (*anthropos*), a man or

human being, and *μορφή* (*morphé*), form:—shaped like or bearing the semblance of a human figure. See p. 87.

ANTHROPOSTYLE.—From *ἄνθρωπος* and *στύλος* (*stylos*) a column; an anthropomorphic pillar. See p. 87.

ARÆOSTYLE.—The widest mode of intercolumniation, 83.

ASTRAGAL.—A small convex moulding. The term is applied chiefly to that which is employed to separate the capital from the shaft of a column.

ASTYLAR.—From the Greek privative *α*, and *στύλος* (*stylos*), a column: columnless or without columns, a term that expresses the absence of columns or pilasters, where they might else be supposed to occur.

ATLANTES.—The kind of figures or statue-pillars so called, 88.

ATTIC.—This is usually defined to be a small Order placed over a principal one; from which it might be supposed that it differed from the Orders in general chiefly by being applied on a smaller scale; instead of which it has nothing of columniation and trabeation in it. There is far greater analogy between an attic and a stylobate, or continuous pedestal, both of them consisting of base, a dado or die, and a simple cornice, and the difference between them consisting chiefly in their application, the stylobate being below, and the attic above the Order. Attics are either plain or pilastered accordingly as the building itself is astylar or the contrary; but what are called attic pilasters are no more than slight *breaks* or projections on the general surface, with the mouldings above and below breaking round them, without any sort of capital, but just after the manner of pedestals: their faces, however, are sometimes distinguished from the intermediate surfaces by being panelled and otherwise enriched, as is done, for instance, in the façade of the new Treasury Buildings: another mode of decoration is to place either a statue, or else a caryatid figure, before each break in the front of the Attic, an example of which occurs in the Strand front of Somerset House. When introduced only over particular portions of a façade, such as the centre or extremities, the Attic is an exceedingly useful element in composition, inasmuch as it serves not only to give such parts greater importance, but also to produce play of outline or sky-line; whereas, if continued throughout, it is apt to produce heaviness as well as monotony, and some degree of feebleness of expression also, its cornice forming, in comparison with the principal cornice below, but a very insignificant finish to the general structure.

AXIS.—An imaginary line through the centre of a column, &c., or its geometrical representation. Where different members are placed over each other, so that the same vertical line on the elevation

divides them equally, they are said to be on the same axis, although they may be on different planes. Thus, triglyphs and modillions are so arranged that one coincides with the axis or line of axis of each column. In like manner, the windows or other openings in the several stories of a façade must all be in the same respective axis, whether they are all of the same breadth or not.

BALUSTER side of Ionic capital, 33.

BASES, remarks on, 109.

BED-MOULDINGS.—This may be understood as a collective term for all the mouldings beneath the corona or principal projecting member of a cornice, which, without bed-mouldings, would appear too much like a mere shelf.

BIRD'S-BEAK MOULDING, 23.

BUCKINGHAM PALACE, 86.

CABLED fluting, 62.

CAPITAL.—The capitals of the columns constitute the principal and most obvious indicial mark of the respective Orders. For those of each of the Three Classes or Orders a certain character conformably with the rest of the Order is to be observed; but that attended to, further restriction is unnecessary. Between several examples, all decidedly referable to one and the same Order, very great special differences occur, and there might easily be a very great many more. Although the capital itself is indispensable, it is so only *æsthetically*, and not out of positive necessity. The necessity is only artistic: decoration of the kind there must be, but the express mode of it is one of those matters which should be left to design, to which it properly belongs. Capitals are just as legitimate subjects for the exercise of taste and invention as anything else in decorative design. The capital is only an ornamental head to the column, and therefore admits of being as freely designed as any other piece of ornament, on the conditions of its being accordant in character with the rest of the Order, and of forming an agreeable transition from the shaft of the column to the architrave.

CARYATIDES.—Anthropostylar pillars or human figures (usually female ones) employed instead of columns to support an entablature. Such figures ought always to be perfectly free from all *attitudinizing*, and to appear to support their burden without any effort. Some very matter-of-fact critics object to caryatides as being at the best only beautiful absurdities; as if statues so applied were particularly liable to be mistaken for living persons subjected to a more severe

punishment than that of being posted up in a niche, or on the top of a building. See also p. 89.

COLONNADING, remarks on, and the effect attending, explained, 116.

COLUMNAR-ARCADING, 116, *note*.

COLUMNATION, remarks on, 71.

CORINTHIAN, or Third Order, 55; Lysicrates example, 57; Tivoli, 66; 'Composite,' or Ionico-Corinthian, 65.

CORNICE.—Doric, 21; Ionic, 44; Corinthian, 64.

CORONA.—That part or member of a cornice which projects out over and protects the bed-mouldings (see *Bed-mouldings*), and throws off the rain from the rest of the entablature.

CYMATUM.—A moulding whose section or profile is convex below and concave above. See *Mouldings*.

DADO.—The general plane surface of a pedestal or stylobate between the upper and lower mouldings.

DENTELS.—The series of small upright blocks introduced among the bed-mouldings of a cornice. They are supposed to be peculiarly characteristic of the Ionic cornice, but are also employed for the Corinthian one, beneath the modillions, which latter are the principal characteristic of the Corinthian cornice, as dentels alone of the Ionic.

DIAMETER.—The lower diameter of the column is taken as the *proportional* measure for all the other parts and members of an Order, for which purpose it is subdivided into 60 parts, called minutes, or into two *modules* of 30 minutes each; but the module is quite an unnecessary distinction, not being, like the diameter, the constant measure of any one member of the Order, and the use of it merely adding to the terms of computation. It is surely much more simple and convenient to write 1.40', meaning 1 diameter and 40 minutes, than 1d. 1m. 10'. Being proportional measures, diameters and minutes are not fixed ones, like feet and inches, but are variable as to the actual dimensions which they express—larger or smaller, according to the actual size of the diameter of the column. For instance, if the diameter be just 5 feet, a minute, being $\frac{1}{60}$, will be exactly 1 inch; if $2\frac{1}{2}$ feet, the minute will be half an inch; or if the diameter be only one foot, the minute is $\frac{1}{60}$ of a foot, or $\frac{1}{2}$ of an inch.

DIE.—See *Dado*.

DIMENSIONS.—In architectural description, some positive dimensions or approximation to them should always be stated. Such mere epithets as *large*, *lofty*, *spacious*, &c., mean nothing,—convey only an exceedingly vague, general idea according to the particular notions of

those who employ them ; and, like all epithets, they are liable to the most shameful abuse.

ECHINUS.—A large convex moulding, generally of elliptical or eccentric contour in the Greek style, and forming the quarter of a circle in the Roman. The echinus is the indicial mark of and constitutes the principal portion of the Doric capital, the other being the abacus ; at least the term echinus is applied especially to that member of the capital, although in many Greek examples its profile has scarcely any convexity, but more resembles a portion of an inverted cone (18). In Roman and Modern Architecture the echinus is usually called the *ovolo*. See *Mouldings*.

ELEVATION may be defined to be the *upright plan* of a building, or any part of a building, showing its exact form and dimensions as they actually exist ; whereas in perspective the forms are shown not as they exist, or are in themselves, but merely as they appear to the eye, according to the station of the spectator. Elevations are of two kinds, viz. *geometrical* and *perspective*. In the former, the whole is projected upon the same *plane*, the remote parts are shown of their full size, and distance can be expressed only by shadow thrown upon the second plane by parts in the nearest one ; whereas Perspective elevation partakes of parallel perspective, and the parts beyond the first plane are shown diminished by distance, and also come into view, although they may be behind others on the first plane, by which they would be concealed in a geometrical representation. For instance, supposing a portico to have a second row of columns in the same axes as those in front, that circumstance would not be at all apparent in a geometrical elevation, but could be understood only by means of the plan, the inner columns being concealed by those before them ; but in a perspective elevation they would show themselves, as would also the ceiling and floor.

ENTABLATURE.—The horizontal portion of an Order ; the *trabeation* or system of beams supported by the columns. There may, however, be entablature without columns,—where the latter are suppressed, as on the flanks of an *apteral* temple ; or omitted entirely, as in *astylar* building. For the entablatures of the respective Orders, see pages 18, 42, 63.

ENTASIS.—A slightly convex curvature given in execution to the outline of the shaft of a column, just sufficient to counteract and correct the appearance, or fancied appearance, of curvature in a contrary direction (*i. e.* concavely), which might else take place and cause the middle of the shaft to appear thinner than it really is. Entasis is there-

fore nothing *positive*: it is not intended to show itself, for were it to do so,—were there to be any visible swelling,—it would be a deformity; yet such deformity has been studiously adopted by many Modern Architects, merely, it would seem, for the sake of making evident that at all events they took pains to guard against an imaginary defect. The subject of entasis has been made one of those *nugæ difficiles* which those who can do nothing else make great parade with. To such, then, be left all such sublimated transcendental niceties. If a column only 30 or 40 feet high would appear thinner in the middle than it really is, unless there made somewhat thicker than it would be were its profile a straight line, the same appearance would take place in any other lofty object, and in a greater degree in proportion to actual height; so that a tower of great loftiness, both positively and proportionally, *ought*—unless entasis were given it, to look thinner in the middle than at top and bottom. If such appearance really does take place, it is one perfectly in accordance with the laws of vision, therefore no more than a natural and perfectly proper one. In all such cases the judgment corrects the eye, and prevents mistakes. It would, in fact, require a very great stretch of imagination to fancy what we know to be straight, and of the same breadth throughout, is not so: if we can fancy that, we can also fancy that the further end of a building is not so high as the nearer one, and that instead of being horizontal, the cornices slope downwards. So much for the fuss made about entasis, including that about the hypothetical curvature in the horizontal lines of the Parthenon, where curvature was administered, if administered at all, in an exceedingly homœopathic ratio.

EPISTYLIUM.—The architrave or horizontal course resting immediately upon the columns. Hence we should denote as *Epistylar Arcuation* that system in which columns support arches instead of horizontal architraves and entablatures. See p. 79.

EPITITHEDAS.—A term applied by some writers, by way of distinction, to the cymatium on the sloping or *raking* cornices of a pediment, which *superimposed* moulding (as its name implies) was frequently largely developed, and enriched with an ornamental pattern.

FENESTRATION, termed by the Germans *Fenster-architektur*, is, in contradistinction from columniation, the system of construction and mode of design marked by windows. Fenestration and Columniation are so far antagonistic and irreconcilable, that fenestration either interferes with the effect aimed at by columniation with insulated columns, as in a portico or colonnade, or reduces it, as is the case with an engaged

Order, to something quite secondary and merely decorative. Astylar and Fenestrated ought, therefore, to be merely convertible terms; but as they are not, we may be allowed to invent that of *columnar-fenestrated*, to denote that mode of composition which unites fenestration with the *semblance*, at least, of the other. Employed as a collective term, Fenestration serves to express the character of a building or design with regard to the windows generally: thus we say, the Fenestration is excellent, or the contrary,—ornate or meagre,—well arranged or too crowded,—which last circumstance is a very common fault, and is destructive both of grandeur and of repose. *Si queris exemplum, circumspecte.*

FERGUSSON, MR., his hypothesis as to the prototype or germ of the Ionic capital, 97.

FILLET.—Any narrow flat moulding or surface is so termed. Fillets are used either to separate or finish other mouldings. The intervals or spaces between the flutes on the shaft of a column are also called fillets, although not actual members, but merely the surface left between the hollowed channels or flutes themselves.

FLUTING.—The collective term for the channels cut on the shafts of columns. Hitherto this has been restricted to little more than two modes, viz. with arrises or sharp ridges, as in the Doric Order (p. 17), or with fillets. A different mode of *striating* the shafts of columns is described at page 40, and many others might easily be devised. Although, as remarked at p. 23, the Greeks did not flute their *antæ*, there may in some cases be adequate reason for fluting *pilasters*, provided they are not Doric ones, and that even though the columns should be unfluted; because such channelling serves to distinguish their shafts from the face of the wall to which they are attached. On the other hand, so far from enhancing effect, fluting impairs it, if the shafts of columns or pilasters are of coloured marble; inasmuch as, instead of producing greater richness, it occasions confusedness, and interferes with the beauty of the material itself.

FRIEZE.—The middle one of the three divisions of an entablature. It derives its name from the Italian *Fregio*, ornament, as being that part of the entablature especially appropriate for sculptural embellishment, yet, in contradiction to such signification, the frieze is all but invariably made a mere plain surface by Modern Architects; except the Order employed happens to be Doric, and then triglyphs are introduced as matter of course, but the metopes left blank, even though ornateness is studied in other respects, and in parts not comprehended in the Order itself. For the Ionic Order, Modern Architects have sometimes employed the so-called *pulvinated* frieze (p. 52),

that is, one whose face is curved convexly; but upon what principle they have appropriated such form of the frieze to that Order in particular, when it is just as suitable for the Corinthian, is not said, and not to be guessed.

GUSTO.—Although in its literal meaning *Gusto* corresponds to our English word Taste, the two terms are so far from being exactly synonymous, that the distinction to be observed between them is rather an important one. Whereas Taste refers to the passive perception of æsthetic beauty, *Gusto* refers to the *relish* on the part of the artist himself which his productions manifest. Taste may be displayed without *Gusto*; and *Gusto* without Taste. For instance, both Rembrandt and Hogarth showed infinitely more *gusto* than taste, as did likewise Vanbrugh. *Gusto* implies the manifestation in the work itself of earnest relish for it, together with a certain raciness of quality which cannot possibly be got at second-hand.

GUTTÆ, Doric, 19.

HERMES.—The distinctive term applied to a pillar or rather a *stèle*, or square shaft terminating in a bust. See p. 90.

HYPÆTHRAL (literally, 'under the sky').—A descriptive epithet applied to such temples as were, or are supposed to have been, partially open to the sky, within their *cella*.

HYPOTRACHELIUM.—The necking of a capital introduced between the capital itself and the shaft of the column. In the Grecian Doric, the hypotrachelium is little more than nominal, being marked only by one or more horizontal channels or incisions, and the flutings continued through them; whereas to the Modern Doric capital a distinct necking is given by the astragal which separates the capital from the shaft, and marks its commencement. But that is considered an essential part of the capital, and as to the Corinthian capital it does not admit of any necking: wherefore the Ionic one possesses a great advantage over either of them, inasmuch as it may have a distinct necking or not, and it may be either plain or enriched.

IN ANTIS, the term explained, 72.

INTERCOLUMN and **INTERCOLUMNIATION.**—The subject of *Intercolumniation* is treated of at page 81, &c. These two terms are generally confounded together; or rather, the second is very improperly substituted for the other, contrary to all analogy of language and distinctness of meaning. Having only a general collective import, *Intercolumniation* can, like *Columniation*, be used only in the singular.

We may say of a portico, &c., that its intercolumniation is good or poor, close or straggling, but not that it consists of so many intercolumniations (according as the number may be), since such mode of expression is no better than a solecistical vulgarism. We might just as well describe a tetrastyle portico as having four *columniations*, as say that it has three *intercolumniations*.

IONIC ORDER, [31](#).

————— Ruskin's newly-invented extinguisher for it, [93](#).

JONES, INIGO, his 'anthropostylar' court, for Whitehall Palace, [89](#).

JOVELLANOS, remark by, [119](#).

LOFTINESS, or Proportional Height. See page [75](#).

'LYSICRATES' CAPITAL, [57](#).

METOPÉ.—The spaces between the triglyphs of the Doric frieze, which in the Parthenon, for instance, were filled in with sculpture; but in modern porticoes that pique themselves upon being *after the Parthenon*, they are mere blanks.

MINUTE.—The sixtieth part of the diameter of the column as a proportional measure. Minutes are written thus, [10'](#), i. e. ten minutes.

MODILLION.—The small bracket-shaped members or ornaments in the Corinthian cornice are termed *modillions*. See page [64](#).

MODULE.—The semi-diameter of the column, or [30](#) minutes. See *Diameter*.

MONOPROSTYLE explained, [73](#), *note*.

MONOTRIGLYPHIC.—That mode of intercolumniation in the Doric Order according to which there is only a single triglyph over each intercolumn, [20](#).

MOULDINGS.—The principal mouldings and the difference of their profiles in the Grecian and Roman styles are exhibited in the following page.

MUTULES.—The small blocks or plates attached to the soffit of the corona in the Doric cornice, [21](#).

NECKING.—See *Hypotrachelium*.

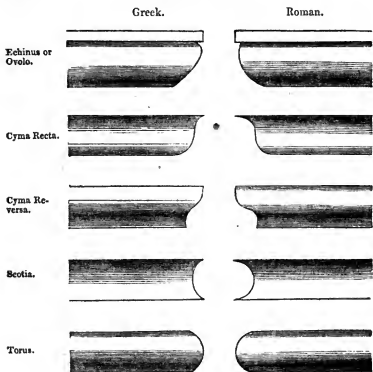
NEW ORDER, the possibility of one, considered, [100](#).

NOTATION, architectural, specimen of, page [75](#), *note*.

ORDER, possibility of a new one, considered, [100](#).

OVOLO.—See *Echinus*.

PEDESTAL.—No constituent or essential part of an Order or a column, but merely a casual addition to it, [7](#).



PEDIMENT answers to the Gable in Gothic Architecture, &c., it being the vertical triangular plane at the end of a roof which slopes downwards on each side from its ridge. The Pediment differs from the Gable in having a *tympanum*, or clearly defined triangular surface with a horizontal cornice below and two sloping or raking cornices. See page 24.

PERSPECTIVE effect, value of, in architecture, 116.

PICTURESQUE, Ruskin's strange definition of, 117, *note*; why colonnading contributes to picturesque effect, 116.

PILASTER.—Unknown to Greek Architecture, in which only *antæ* (see *Antæ*) were admitted: Pilasters are employed by the Moderns as substitutes for an Order in engaged columns, and are, perhaps, even preferable to the latter, inasmuch as they combine better and more naturally with the wall to which they are attached.

PLAN.—A plan may be familiarly described as an architectural *map*, or map of a building: therefore only those who cannot comprehend a geographical or topographical map—a degree of obtuseness hardly

credible—can be at any loss to understand an architectural one, the latter being precisely of the same nature as the others, with this difference in its favour, that it is much less conventional. To define it more exactly,—a plan is a *horizontal section* supposed to be taken on the level of the floor through the solid parts of the fabric—walls, columns, &c., so as to show their various thicknesses and situations, the dimensions of the several spaces or rooms, the position of the doors by which they communicate with each other, and various particulars that cannot otherwise be explained. Studying buildings without plans is like studying geography without maps. Nevertheless, most persons ignore—affect a genteel ignorance of such vulgar and technical drawings as plans. Plan frequently costs the Architect more study than all the rest of his design. Very much mistaken are they who suppose that convenience alone has chiefly to be considered. Convenience is, of course, or ought to be made a *sine quâ non*; yet it is not so much a positive merit in itself, as the want of it is a positive defect. Mere convenience is not an artistic quality: from that to beauty of plan,—to striking combinations, and studied effects, and varied play of arrangement, the distance is very great. A common-place plan is but a very dull uninteresting affair. It is no more than what any builder can accomplish; but a plan replete with artistic combinations, piquant play, and well-imagined contrasts, is no every-day matter.

PODIUM.—A continued pedestal; a dwarf pedestal wall; a closed parapet employed instead of an open balustrade.

POLYSTYLE.—Having a number of columns. Where columns occur behind columns, as where a portico has inner columns, like that of the Royal Exchange, such portico may be termed *polystyle*.

PORCH.—Any small portico considerably lower than the main structure to which it is attached may be so termed, in contradistinction to one carried up the height of the building, or as high as the principal cornice.

PORTICO.—For the different plans and denominations of porticoes, see p. 72.

PRECEDENT, how far to be deferred to, 113.

PROFILE.—The outline of a series of mouldings, or of any other parts, as shown by a section through them.

PROPORTION.—The magnitude of one part as compared with some other, without regard to actual size, consequently not to be confounded with 'dimension'; for columns widely different as to size may be similarly proportioned, and *vice versâ*. The term 'proportion' is used absolutely in the sense of 'good proportion'; although every thing that

has shape has proportions of some kind or other. The subject of Proportions has been greatly mystified by writers who have laid down certain fixed proportions as the best of all for every occasion alike, and as the *ne plus ultra* of artistic taste. But fixed proportions can be followed mechanically by every one alike; whereas it requires ability to deviate successfully from routine measurement, and apply the *poco piu* or the *poco meno* as the particular occasion or the particular effect aimed at may require—at least justify. It is the eye that takes cognizance of proportions; and the Architect's own eye ought to be quite as correct as that of other people.

PROSTYLE.—A portico which projects from the body of a building, or the rest of a façade. See p. 72.

PULVINATED.—A frieze whose face is convex instead of plane is said to be *pulvinated*, from its supposed resemblance to the side of a cushion, which swells out when pressed upon. See p. 52.

RAKING CORNICES.—A term, rather unmeaning in itself, applied to the inclined cornices on the sloping sides of a pediment.

ROMAN ARCHITECTURE, remarks on, 76.

RUSKIN, the Ionic 'extinguisher,' his curious doctrine concerning the Orders, 93.

———, his queer definition of the Picturesque, 117, *note*.

RUSTICATION.—Although Rustication is not spoken of in this treatise, the term is here inserted for the purpose of remarking that what is so called might frequently be more correctly described as *Decorative Masonry*, since, so far from expressing rudeness or coarseness, it may be made to display the most studied nicety and elaborate finish. Rustication, no doubt, originated in a very rude mode of construction; but what was at first clumsiness and irregularity, was afterwards refined into an artful and symmetrical disposition of the stones and courses of masonry, by a similar æsthetic process to that which converted the original amorphous stone pillar into the Doric column. To call such masonry, as some have done, only *cicatrising* and *gashing*, betrays a loss for both arguments and words. Decorative masonry is most assuredly not according to Greek taste or practice; for the Greeks affected to suppress the appearance of *articulation* in masonry, and thereby to give their buildings, as far as possible, the look of not being *fabricated*, but *carved* out of one block of solid material. Yet it does not therefore follow that the other mode of decidedly articulating and pronouncing the joints and courses of the stones is bad, because it is an opposite one. So far from being unæsthetic, it pos-

sesses much that recommends it artistically, for it gives *colour*, and produces richness of surface where there would else be blankness. A wall whose face is so decorated forms an admirable ground to columns or pilasters, which it serves to relieve very effectively, as is exemplified in the screen façade of Dover House, that little architectural gem by Holland, which, though by no means faultless, has more of genuine artistic quality than any other building of its time in the whole Metropolis.

SCOTIA.—From the Greek *σκότια* (*skotia*), darkness: the large hollow or concave surface in the base of a column. The scotia and tori mutually set off each other, and produce a piquant antithesis as regards light and shade as well as profile or outline.

SECTION.—A vertical plan of the interior of a building, showing it as it would appear upon an upright plane *cutting through it*. Though rarely shown, sections are almost as indispensable as plans, like which, they show the thicknesses of the walls; and in addition those of the ceilings and floors; and show also *heights*, both of the rooms themselves, and of doors and windows;—moreover, the forms of the ceilings, whether flat, or coved, or vaulted. In one respect, too, a section partakes of the nature of an elevation, the plane parallel to the line of section being an elevation of the interior, or rather consisting of as many elevations as there are separate rooms or divisions. Sections may be described as either *furnished* or *unfurnished*; the former show only construction and the strictly architectural parts, wherefore, if the side of a room happens to be quite plain, without door, chimney-piece, or other feature, that side or space will be a blank, or little better. Furnished sections, on the contrary, exhibit, besides what strictly belongs to the Architecture and its decoration, mirrors, pictures, statues, furniture, draperies, and all other accessories. The number of sections required depends upon the nature of the plan, and what there is worth showing. If the design be worthy of it, there should be as many sections as will suffice to show every side of every principal apartment; though it may not be necessary to repeat the entire section through every floor. Sections are the *delicæ* of architectural illustration, and, it would seem, far too precious to be frequently exhibited.

SHAFTS of columns, modes of decorating, 110.

SOFFIT.—From the Italian *soffitto*, a ceiling; the under surface of any projecting moulding or member.

STATUES, remarks as to the disposing them in architectural composition, 90.

STYLE, what ought now to be adopted as a general and fundamental style, 119.

—, in the sense of a column (from the Greek *στυλος*, a column), enters into a great number of useful compound terms referring to matters connected with columniation, and which may here be grouped together, so that any word ending in 'style' may be found here, though passed over in its alphabetical order. The number of columns in the front of a pedimented portico is briefly expressed at once by any of the following terms:

Distyle in antis, two columns and two antæ.

Tetrastyle „ four columns.

Hexastyle „ six „

Octastyle „ eight „

Decastyle „ ten „ almost the greatest number that can be placed beneath a pediment.

As regards Intercolumniation, we have—Pycnostyle—Eustyle—Aræostyle, 79.

The terms descriptive of the plans and columniation of ancient temples are—Prostyle—Amphiprostyle—Peristyle, 69.

Also,

Monoprostyle, a prostyle with *one* intercolumn on its flanks.

Diprostyle „ „ *two* „ „

Triprostyle „ „ *three* „ „

To which may be added—

Heterostyle, composed of different Orders, as where one Order is employed for the centre of a composition, and another for the wings.

Macrostyle denotes a large Order, that is, one forming the height of the building.

Microstyle, on the contrary, denotes a lesser Order, belonging only to some low division of the building, as for instance a porch. Thus porticoes are *macrostylar*, porches *microstylar*. In Italian composition, microstylar doors and windows, *i. e.* doors and windows decorated with small columns, are of frequent occurrence.

STYLOBATE.—That part of a structure on which an Order is raised, and on which the columns immediately stand. The term is, however, restricted to what partakes of the character of a pedestal, and not to a mere plinth or socle on the one hand, or to a lower fenestrated floor on the other.

SUPERCOLUMNATION, or the placing one tier of columns over another, 84.

TELAMONES, the anthropomorphic pillars, so called, 88.

TERMINUS, the kind of figure so called, 9, 89.

TORUS, a large convex moulding or *coil* in the base of a column.

TRABEATION explained, page 80.

TUSCAN, the Order so called, 29.

TRIGLYPHS,—literally, "three-channelled" (see page 19),—the upright blocks or tablets peculiar to the Doric frieze.

TYMPANUM.—The general surface of a pediment or space enclosed by the horizontal and raking cornices, and which, if owing to its situation well fitted for the display of sculpture, is, in consequence of its shape, rather the contrary: see page 25. It would therefore, perhaps, be better to confine statuary to a single group of figures in the centre, either leaving the rest of the tympanum plain, or employing some other mode of decoration for it, as might in some cases be done for the entire surface. The head of an arch or arcade over a door or other aperture is also termed a tympanum.

VOLUTE.—The characteristic ornaments and indicial marks of the Ionic capital formed by circumvolving spiral mouldings are termed volutes. The small circle in which the spirals terminate is called the *eye* of the volute.



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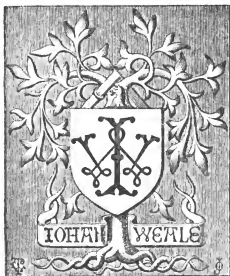
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| <p>1. Hollow and Bar Keels, Stern and Stern Posts.</p> <p>2. Side Frames, Floorings, and Blige Pieces.</p> <p>3. Floorings continued — Keelsons, Deck Beams, Gunwales, and Stringers.</p> <p>4. Gunwales continued — Lower Decks, and Orlop Beams.</p> <p>5. Angle-Iron, T Iron, Z Iron, Bulb Iron, as rolled for Iron Ship-Building.</p> <p>6. Rivets, shown in section, natural size, Flush and Lapped Joints, with Single and Double Riveting.</p> <p>7. Plating, three plans, Bulkheads, and modes of securing them.</p> <p>8. Iron Masts, with Longitudinal and Transverse Sections.</p> <p>9. Sliding Keel, Water Ballast, Moulding the Frames in Iron Ship-building, Levelling Plates.</p> <p>10. Longitudinal Section, and Half-breadth Deck Plans of large Vessels, on a reduced scale.</p> <p>11. Midship Sections of Three Vessels of different sizes.</p> <p>12. <i>Large Vessel</i>, showing details.— <i>Fore End</i> in Section, and End View, with Stern Post, Crutches, Deck Beams, &c.</p> | <p>13. <i>Large Vessel</i>, showing details. — <i>After End</i> in section, with End View, Stern Frame for Screw, and Rudder.</p> <p>14. <i>Large Vessel</i>, showing details. — <i>Midship Section</i>, Half breadth.</p> <p>15. <i>Machines</i> for Punching and Shearing Plates and Angle-Iron, and for Bending Plates; Rivet Hearth.</p> <p>16. <i>Machines</i>. — Garforth's Riveting Machine, Drilling and Counter Sinking Machine.</p> <p>17. <i>Air Furnace</i> for Heating Plates and Angle-Iron; various Tools used in Riveting and Piatling.</p> <p>18. <i>Gunwale</i>, Keel, and Flooring; Plan for Sheathing Iron Ships with Copper.</p> <p>19. Illustrations of the Magnetic Condition of various Iron Ships.</p> <p>20. Gray's Floating Compass and Binnacle, with Adjusting Magnets.</p> <p>21. Corroded Iron Bolt in Frame of Wooden Ship; Caulking Joints of Plates.</p> <p>22. <i>Great Eastern</i>—Longitudinal Sections and Half-breadth Plans.</p> <p>23. <i>Great Eastern</i>—Midship Section, with details.</p> <p>24. <i>Great Eastern</i>—Section in Engine Room, and Paddle Boxes.</p> |
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This Work may be had of Messrs. LOCKWOOD & Co., No. 7, Stationers' Hall Court, and also of Mr. WEALE; either the Atlas separately for 1l. 2s. 6d., or together with the Text price as above stated.

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